MANUFACTURERS RECORD

Land of Opportunity

The South has much to offer new and expanding industries. It is rich indeed in natural resources which offer a multitude of varied attractions for industry. But the South's greatest economic asset is its abundant supply of human beings who want to work at both "shirt sleeve" and "white collar" jobs.

The South's vast and valuable supply of human resources, while a very positive factor in its industrial development, has never made itself fully felt because an important portion of it has been siphoned-off for years.

Many of the Area's most promising young men and women have been drawn to the industrial centers of the North and East because they could not find suitable outlets for their talents, nor sufficient promise for their labors in industrial or business pursuits in the South. It is gratifying to realize that this situation is changing.

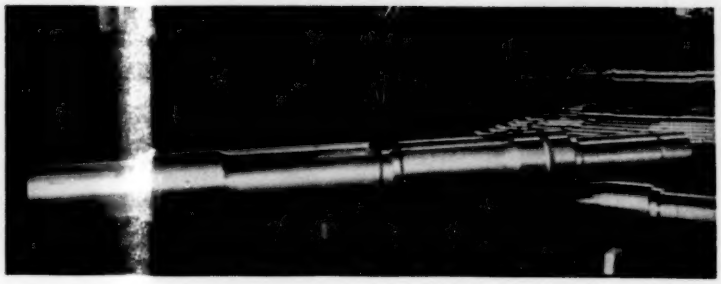
The development of natural resources of all kinds is creating a favorable industrial climate in the South. Today its rapidly growing industry demands its best young brains in large numbers. It is the Southern industrialists' responsibility to alert the youth of the region to these opportunities. Both will profit.

Slings for the Touchy "Special" Jobs

Perhaps your plant is one of the many requiring unusual slings for specialized handling jobs. If so, we think we can help you work out all the details. Then our modern shops will fabricate the slings to specifications.

Two such jobs are shown on this page. One is the handling of a big, heavy piston. Bethlehem Torpedo slings were chosen, with the added specification that part of the slings be neoprene-covered. The other photo shows a forged-steel axle being lifted by a braided sling, each of whose ends is reinforced by a sturdy arc-thimble.

Bethlehem makes special slings in every type you'll ever need. The ones pictured here are but two of the many recent examples produced by our shops. You might find them helpful in your own particular set-up. But if your requirements run along different lines, we can design and manufacture the units that will prove most suitable. And don't forget, all kinds of standard slings are also available from Bethlehem—regular grommet, braided, single-part, bridle, and other types.



Please feel free to call in one of our engineers whenever you need some help in planning lifts. No matter how involved the study may be, you'll find the Bethlehem man well qualified to aid you with your problems.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

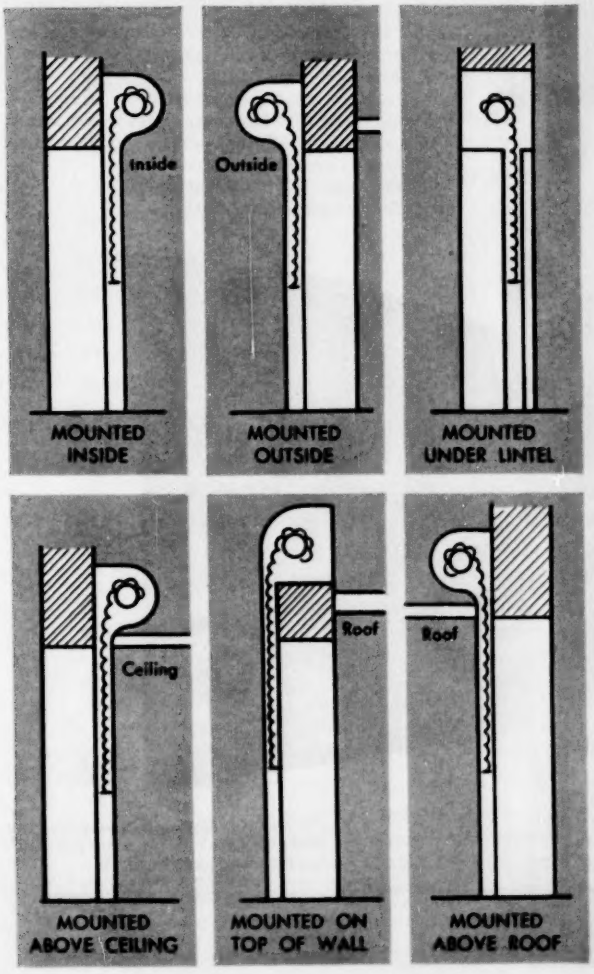
On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation
Export Distributor: Bethlehem Steel Export Corporation

BETHLEHEM WIRE ROPE SLINGS

MAKE THE TOUGH LIFTS EASY

BETHLEHEM STEEL

Six Basic Ways to Install Kinnear Steel Rolling Doors



To Save Maximum Space, and Fit Any Building Design

The compact hood in which the Kinnear Rolling Door coils when opened, can be installed inside or outside the building . . . in the wall or on top of it . . . above the ceiling or above the roof . . . above or below the opening. The door can even be installed at any angle, (as shown below), upside down or horizontally.

In short, Kinnear Rolling Doors not only give you rugged, long-lasting, low-cost space-saving efficiency; they also adapt easily to *any building design or operating need.*

Kinnear Rolling Doors can be installed so that every inch of floor, wall and ceiling space around a doorway (inside, outside, or on both sides of the opening) is fully usuable at all times.

When opened, Kinnear Rolling Doors clear *the entire door area,* and stay out of reach of wind or traffic. When closed, they provide an all-steel barrier against fire, wind, intrusion, or vandalism. Built any size, with manual, mechanical or electric-motor operation. Easily installed in old or new buildings. Write for additional information.

The KINNEAR Manufacturing Co.

FACTORIES:
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1742 Yosemite Avenue, San Francisco 24, Calif.
Offices and Agents in All Principal Cities

KINNEAR ROLLING DOORS

MODERN FIRE PROTECTION SYSTEM

Reduces Insurance Costs 80 Per Cent for the Crest Company

It's good business to anticipate emergencies . . . and save money at the same time. The Crest Company, Edgefield, S.C., automobile seat cover manufacturers, did it with an automatic sprinkler system and a 75,000-gal. Horton® elevated water tank. This combination provides fire protection 24 hours a day to the plant's 32,300 sq. ft. of floor area. In addition, it has reduced the cost of fire insurance premium from $25.50 to $5.10 per thousand . . . a savings that will repay the entire cost of the sprinkler system and tank in about seven years.

A Horton elevated tank will provide a dependable gravity pressure water supply for your plant too. Horton ellipsoidal-bottom elevated tanks are built in sizes to 500,000 gals. . . . radial-cone bottom tanks to 3,000,000 gals. Write our nearest office for complete information.

The 75,000-gal. Horton ellipsoidal-bottom elevated water tank shown above provides a primary water supply for the automatic sprinkler system at the Crest Company, Edgefield, S. C.

Chicago Bridge & Iron Company

Atlanta • Birmingham • Boston • Chicago • Cleveland • Detroit • Houston
Los Angeles • New York • Philadelphia • Pittsburgh • Salt Lake City
San Francisco • Seattle • Tulsa

Plants in
BIRMINGHAM, CHICAGO, SALT LAKE CITY and GREENVILLE, PA.

MANUFACTURERS RECORD

ESTABLISHED 1882

Devoted to the Industrial Development of the South and Southwest

Volume 124 July, 1955 Number 7

Business Trends 9

New and Expanding Plants 14

Little Grains of Sand 16

Editorial 21

Market Resumes Advance to Set New High Record
by Robert S. Byfield 22

Kerrigan Iron Announces New Bridge Flooring Division 23

South's Labor Pool is Vital Resource
by Caldwell R. Walker 24

Supplemental Unemployment Benefit Plans May Be Blocked by State Opposition in South
by Sidney Fish 26

Factors Contributing to Westinghouse' Selection of North Carolina Site 28

Industrial Expansion 30

North Carolina State College Dedicates Nuclear Reactor to Burlington Industries 32

Industrial Paint Manufacturing at Oklahoma Paint Firm 35

Port Activity 37

Southerners at Work 41

New Products 43

Late News Briefs 47

Who's Where 57

Financial Notes 59

Business Notes 60

Index for Buyers 64

Index of Advertisers 66

MANUFACTURERS RECORD PUBLISHING CO.

Publishers of Manufacturers Record, Daily Construction Bulletin and Blue Book of Southern Progress.

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"The Manufacturers Record," published monthly by Manufacturers Record Publishing Co., 109 Market Place, Baltimore 3, Md. Entered as second class matter at Baltimore, Md., under the act of March 3, 1879. Volume 124, No. 7. Single Copies 35c. Back Numbers over three months old, 50c.

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Handsome-looking! Most of it is a Butler steel building. Small difference in price—big difference in looks and performance.

take BUTLER factory shearing and punching for instance...

Watch 'em *erect* steel buildings if you want to find out why it makes such a *big* difference when it's a Butler. Every Butler structural fits. Every bolt hole lines up. Every panel joins exactly. No extra field tailoring.

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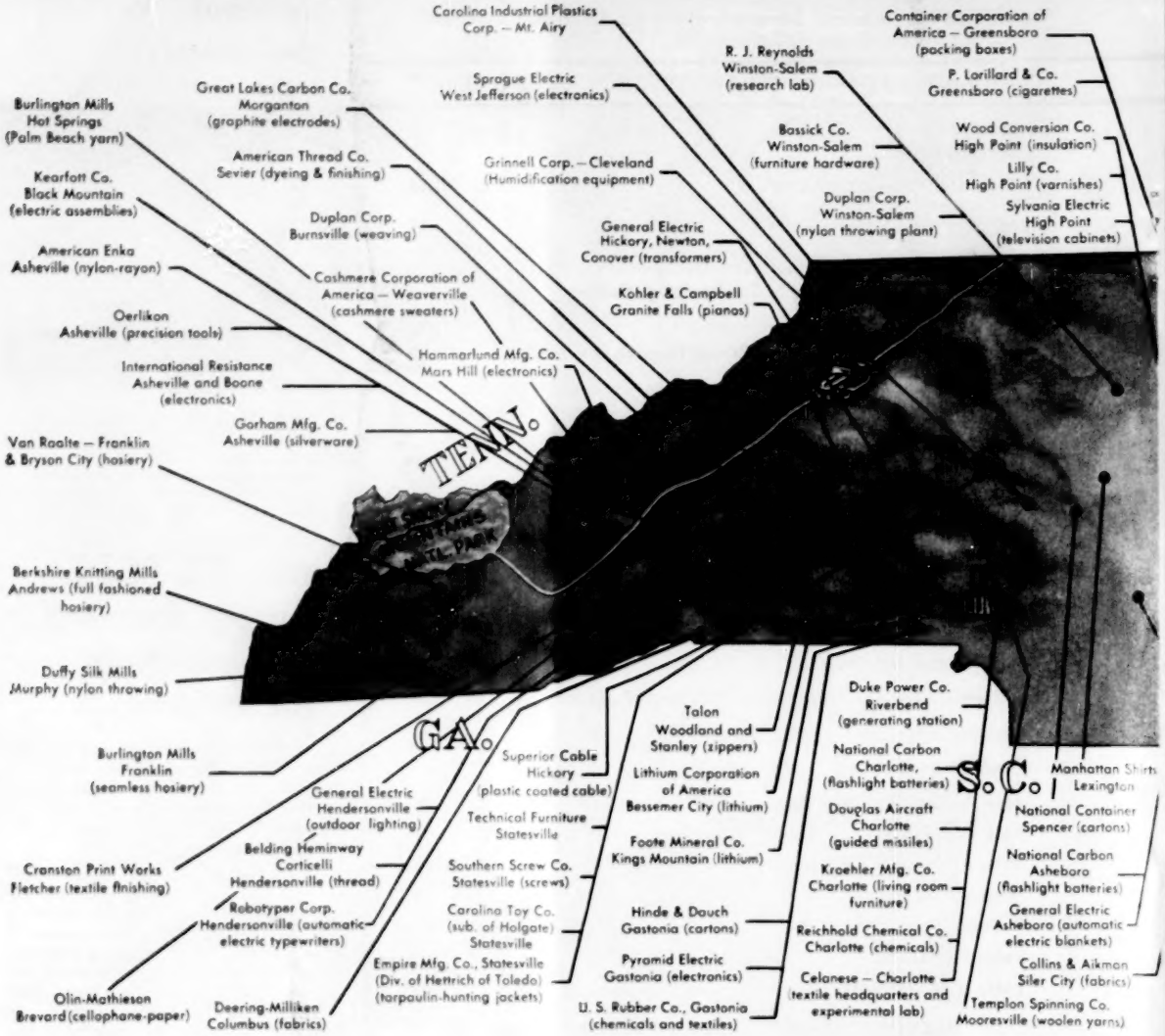
City State

POST-WAR INDUSTRIAL GROWTH



The map tells only part of the story of the phenomenal industrial advance of North Carolina since World War II.

From the mountains to the sea in North Carolina, forward-looking companies are selecting desirable locations which permit unrestricted growth.

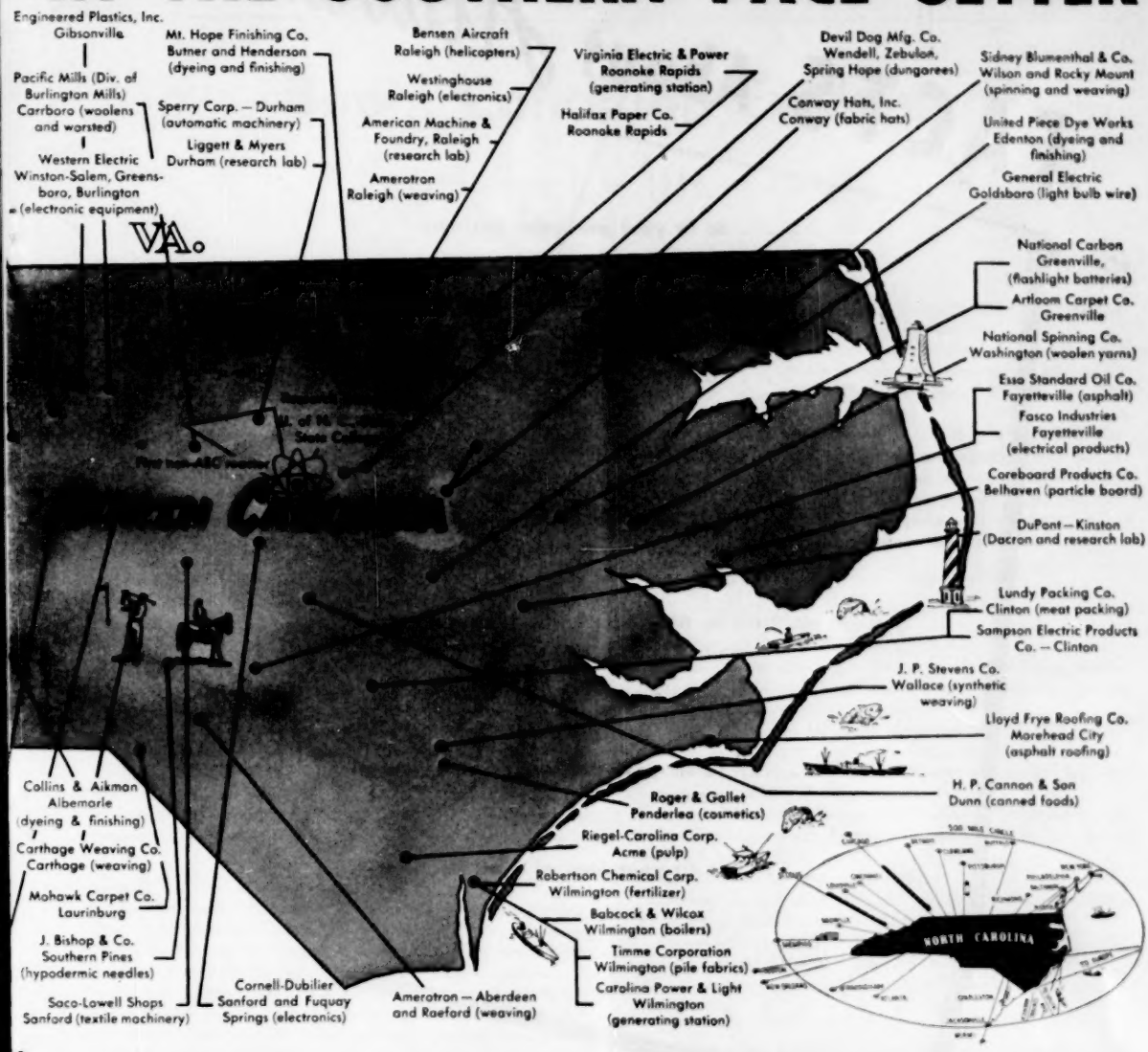
Diversity is the keynote, with production ranging from Aircraft to Zippers. Many of the companies locating and expanding in North Carolina are established leaders in their fields, some are readying themselves for spectacular developments in the atomic era now unfolding. All are preparing to make the most of growth opportunities that abound in this friendly Mid-South climate.

Favorable first experiences with North Carolina's industrial advantages have led to multiple plants in many cases — the most convincing evidence of satisfaction.

North Carolina workers are now producing complex electronic systems, "miracle" synthetic fibres, paper and cellophane, heavy machinery, high style fabrics, silverware and ceramics, precision instruments, fine furniture, foam rubber, as well as the textile and tobacco products of which the state leads the nation.

Still an uncrowded State, with some counties which have no industry but ample labor and space, growth oppor-

IN THE SOUTHERN PACE SETTER



tunities continue for aggressive companies. Many towns are prepared to finance buildings for lease or sale.

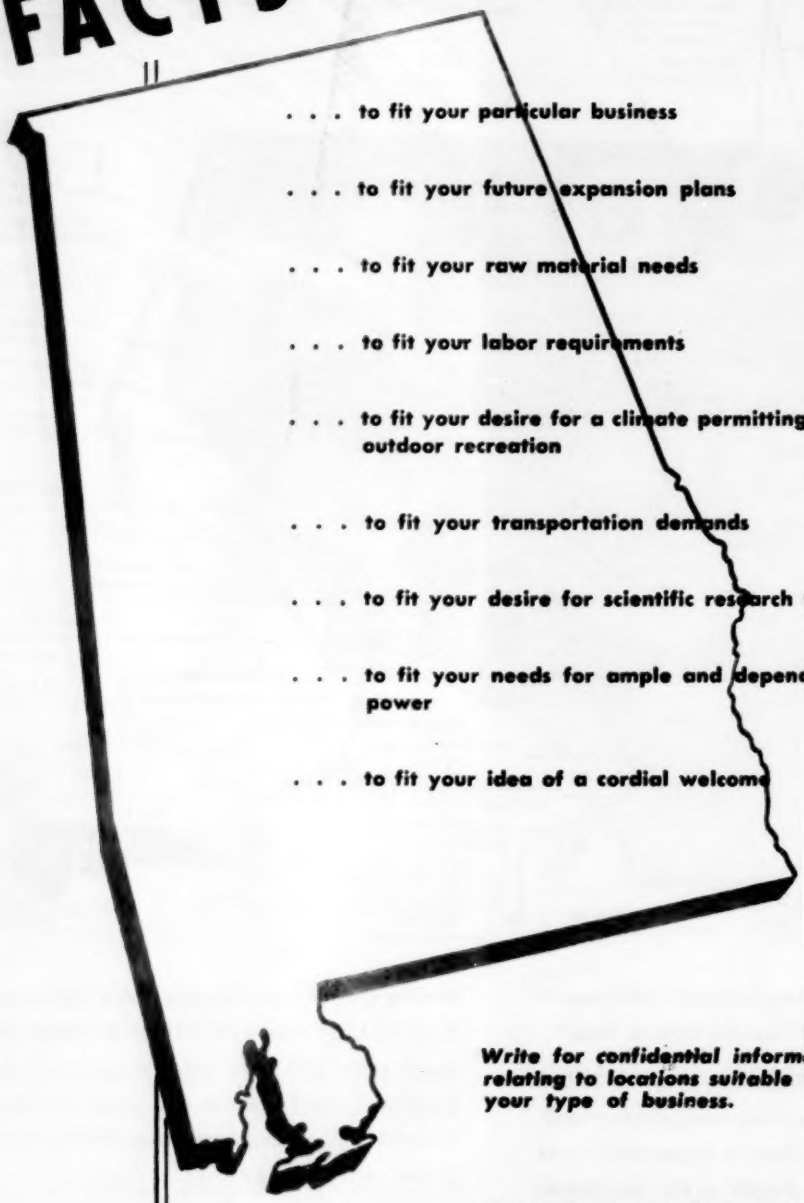
Seventy thousand miles of highways, of which 36,000 are paved, are part of the excellent transportation facilities. Labor can be drawn from a larger radius and from mechanized farms by benefit of the easy travel.

The entire State — with none of its 1800 communities having more than 150,000 population — has been certified for the National Industrial Dispersion Program. Some areas also have been certified for the O. D. M. Accelerated Tax Amortization Program.

Healthy growth is stimulated by such additional factors as accessibility to markets (53% of the Nation's population is within 500 miles and overnight reach of North Carolina), plentiful power and water for industry, a favorable tax package, and cooperative labor with a proven record of productivity.

Desirable urban and rural sites, some with buildings, are available in mountain, piedmont and coastal areas. For the brochure "Plant Location Factors" call, wire or write Ben E. Douglas, Director, Department of Conservation and Development, Raleigh 7, North Carolina.

FACTS About *Alabama*



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. . . to fit your labor requirements

. . . to fit your desire for a climate permitting year 'round outdoor recreation

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. . . to fit your desire for scientific research facilities

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Write for confidential information relating to locations suitable for your type of business.

Industrial Development Department

Alabama Power Company

Helping Develop Alabama

BIRMINGHAM 2, ALABAMA

BUSINESS TRENDS

Boom Condition Evident

Recovery from 1954 Recession Now Definitely Complete

A return to boom condition is clearly evident in the nation's business activity.

After a two-year interval of recession followed by stability, new high records are now being established in a number of economic sectors.

Most spectacular, and probably the most farreaching of these recoveries exists in the field of Steel and Iron production. Recently the American Iron and Steel Institute issued this bulletin:

"During the month of May (1955) the production by blast furnaces in the United States set a record. The output of pig iron and ferroalloys was 6,804,935 net tons. The blast furnaces were operated at an average of 95.4 per cent of capacity."

According to weekly estimates issued by the Steel Institute, total current production of Steel and Iron is running about seven per cent higher than for similar periods of 1953 when earlier high records were being set.

Contributing strongly to this showing by the steel industry is the continued high output of motor vehicles. It is estimated that motor vehicle production normally absorbs about 25 per cent of the steel that is produced in the United States. Consequently it can logically be expected that steel output will remain at very high levels so long as automobile manufacturers can maintain the industry's present dizzy pace.

Construction Speeds Forward

Another hefty customer of the steel mills, none other than the dynamic Construction industry itself, also continues to mark up new records. In this case, however, there is no recovery to be reported for the simple reason that there has existed nothing from which to recover. While some industries felt rather heavily the effects of the 1954 recession, Construction sailed blithely along as though recession was an unknown word in the industry's vocabulary. Currently there are few, if any, signs of subsidence in this roaring segment of the business ensemble.

Says the U. S. Department of Labor in its May summary: "Nonfarm housing starts advanced seasonally in May to 132,000. This was 22 per cent above the figure for May 1954 and 12 per cent under the all-time high reached in May 1950." And the Department states in another release:

"New construction activity is expected to reach $41.8 billion in 1955, 11 per cent above last year's record of $37.6 billion. . . . Prospects are that both private and public construction will reach an all-time high in 1955."

Consumer Purchases High

The speed of Consumer Expenditures, another highly important element in the increase of business activity, continues unabated. And, along with consumer avidity for new goods and services, is to be found an increasing volume of mortgage loans and instalment debt, normal concomitants of high level economic activity.

Business demand for additional lines of credit also is apparent in the rising volume of Commercial and Industrial loans reported by Federal Reserve Board for all of its member banks.

As the Board's monthly summary points out, it is particularly significant that business borrowing has been steadily rising thus far in 1955 although such loans normally tend to decline during the first half of the year. This contravention of trend indicates business confidence looking forward to increase of inventories and other forms of investment.

Employment Now Moving Up

As though to clinch the conviction that business is headed toward new highs, Employment which has tended to lag other elements of recovery, is currently moving upward at fast pace.

The nonfarm job total for May rose by 250,000 to 48.9 million, as reported by U. S. Department of Labor.

Manufacturing and Construction led other business groups, according to the report.

Stepped up activity was also reflected in a hefty rise in factory hours which brought the workweek to the record level of May 1953.

An uptrend in employment was noted in most manufacturing groups with sharpest gains in metal and metal products industries.

Construction employment showed a rise of 141,000, bringing total employed to 2.5 million, about the same as last year and somewhat under May 1951, record for the month.

Weak Spots May Exist

Turning to the less optimistic developments, it must be noted that the Farm and Mine situations are still less healthy than the remainder of the economy and, after many years of rising trend Rents now display a definite tendency to move lower.

While these weaknesses are not acute in any instance, there is always the possibility that their adverse trends may become aggravated and spread to other elements of the business community.

Purchasing power, especially, is at stake in the agricultural situation, and a sharp dip in the level of rents could conceivably imbue the construction industry with a dampening effect.

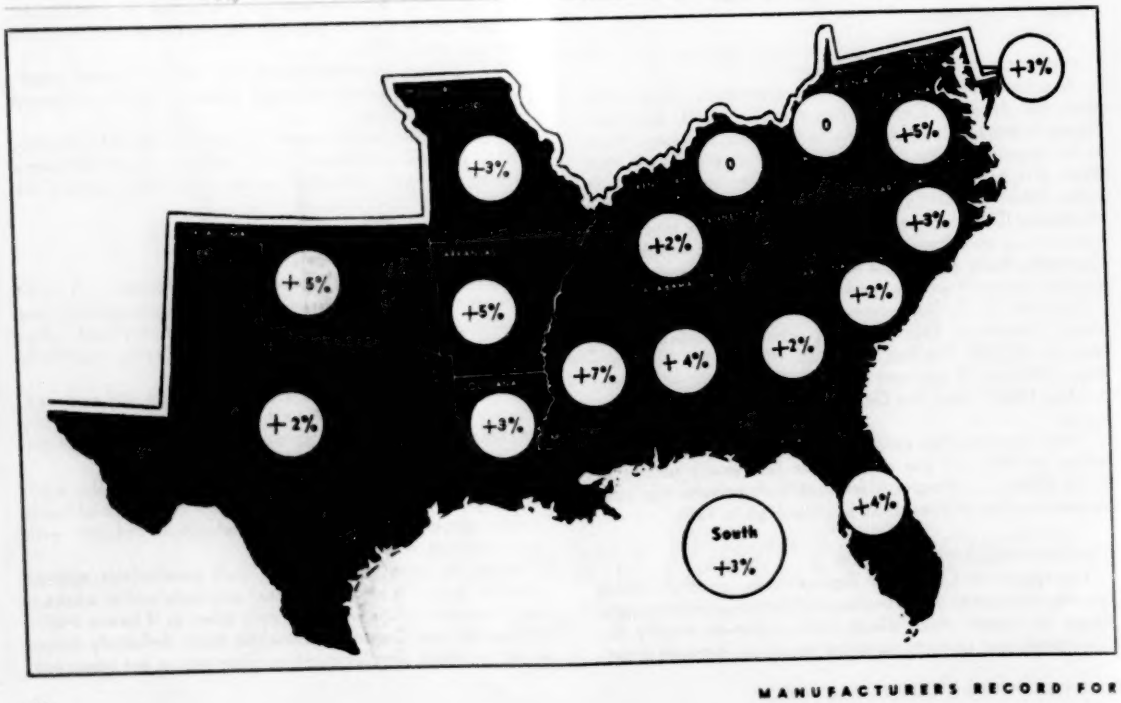
However, as of the present, such possibilities appear remote, and it is most likely that any substantial weakening of present gains will come only when or if heavy traffic in Capital and Consumer Durables turns definitely downward, of which development no signs are as yet apparent.

SOUTHERN BUSINESS VOLUME

Business Volume by States ($ Million)

First 4 mos. of 1955 with gain (or loss) over first 4 mos. of 1954

	Farming	*Mining*	*Construction*	*Manufacturing*	*Utilities*	*Finance*	*Wholesale Trade*	*Retail Trade*	*Service Trade*	*Business Volume*
Ala.	$ 97 even	$ 37 even	$ 146 +22%	$ 967 +2%	$ 136 even	$ 123 even	$ 650 +3%	$ 738 +7%	$ 120 +6%	$ 3,014 +4%
Ark.	145 +11%	40 +5%	85 +51%	318 +2%	85 even	48 even	320 +2%	449 +5%	60 even	1,550 +5%
D. C.	— —	— —	89 +28%	74 —3%	96 even	125 even	520 even	547 +10%	108 even	1,559 +4%
Fla.	283 +21%	28 even	378 +15%	518 +9%	228 even	234 +2%	1,042 —6%	1,419 +8%	224 +2%	4,354 +4%
Ga.	142 —3%	12 even	246 +30%	1,385 +6%	198 even	174 even	1,489 —3%	917 +6%	178 +2%	4,741 +2%
Ky.	192 —8%	118 —8%	173 —24%	1,045 +4%	158 even	97 even	800 —5%	830 +5%	117 +2%	3,530 even
La.	88 —11%	327 +15%	217 —4%	976 —2%	229 even	131 even	819 +12%	847 +8%	125 +3%	3,759 +3%
Md.	63 —8%	4 even	266 +12%	1,292 +1%	216 even	190 even	1,100 even	1,032 +10%	156 +5%	4,319 +3%
Miss.	122 —11%	38 —14%	80 +35%	362 +7%	77 even	49 even	408 +9%	456 +15%	68 +10%	1,660 +7%
Mo.	282 —9%	35 even	304 +40%	1,958 even	370 even	323 even	2,738 +2%	1,458 +9%	300 even	7,768 +3%
N. C.	115 —10%	8 even	212 +4%	2,232 +4%	191 even	155 +8%	1,352 +1%	1,096 +8%	164 even	5,525 +3%
Okla.	122 +7%	220 +5%	141 even	622 +4%	145 even	107 +2%	699 +3%	723 +13%	111 —5%	2,890 +5%
S. C.	52 —8%	4 even	165 —4%	948 +4%	75 even	68 even	422 even	614 +3%	76 even	2,424 +2%
Tenn.	13[illegible] —5%	20 even	253 +10%	1,141 +2%	164 even	153 even	1,456 even	949 +7%	169 +2%	4,437 +2%
Tex.	463 even	1,092 +1%	761 +10%	3,472 +2%	654 even	528 [illegible]	3,326 even	3,121 +6%	520 even	13,937 +2%
Va.	122 —6%	33 even	272 +29%	1,430 +3%	2[illegible] even	[illegible] +8%	864 +11%	1,028 +7%	167 +5%	4,346 +5%
W. Va.	42 even	20[illegible] even	7 +40%	559 +1%	143 even	60 even	329 —7%	490 +3%	74 even	1,974 even
South	2,45[illegible] —2%	2,220 [illegible]1%	3,85[illegible] +11%	19,799 +2%	3,405 even	2,755 +2%	18,334 even	16,714 +8%	2,737 +1%	71,787 +3%

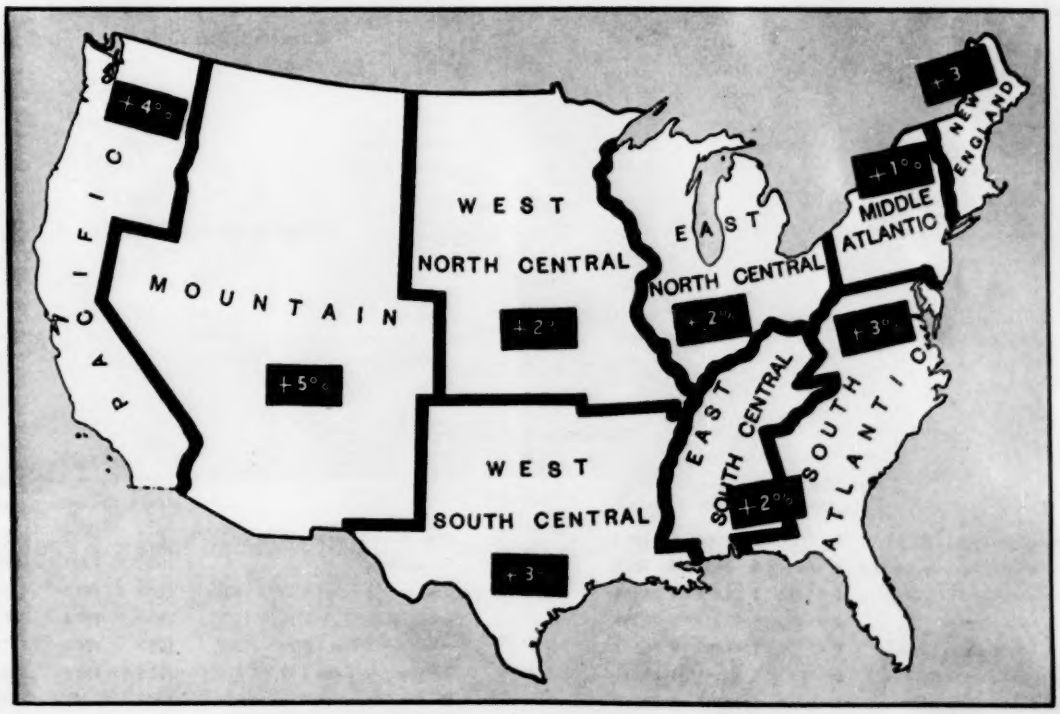


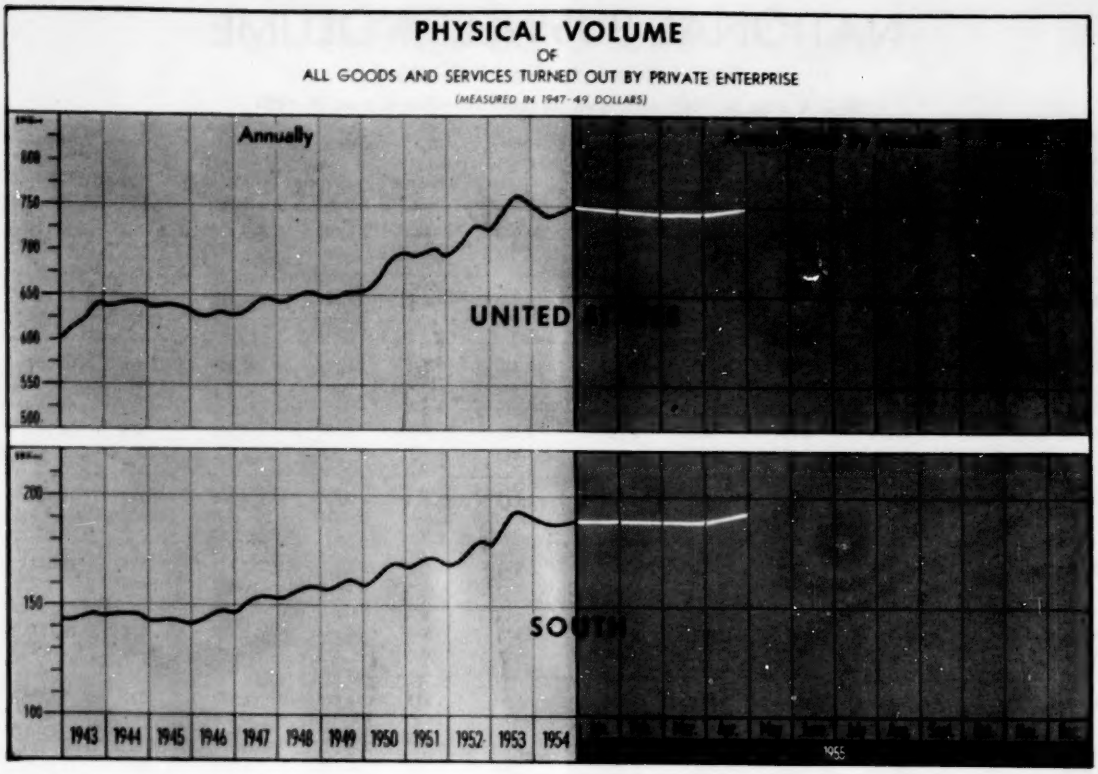
NATIONAL BUSINESS VOLUME

Business Volume by Regions ($ Million)

First 4 mos. of 1955 with gain (or loss) over first 4 mos. of 1954

	Farming	*Mining*	*Construction*	*Manufacturing*	*Utilities*	*Finance*	*Wholesale Trade*	*Retail Trade*	*Service Trade*	*Business Volume*
New Eng.	$ 286 +14%	$ 19 +3%	$ 656 +22%	$ 5,921 +1%	$ 630 +1%	$ 846 +2%	$ 3,252 even	$ 3,879 +7%	$ 646 +2%	$16,135 +3%
Mid. Atl.	619 +2%	272 —20%	2,279 +13%	19,998 even	2,776 —2%	3,250 even	21,624 even	11,273 +8%	3,026 +1%	65,117 +1%
E. N. Cen.	1,841 —5%	295 even	2,263 +14%	26,423 +2%	2,465 even	2,211 +3%	16,736 even	12,394 +7%	2,426 +1%	67,054 +2%
W. N. Cen.	2,473 —3%	318 —3%	960 +25%	6,354 even	1,153 even	933 even	8,173 +1%	5,352 +8%	855 +1%	26,571 +2%
S. Atl.	845 +1%	293 —10%	1,750 +13%	8,667 +3%	1,418 even	1,224 even	7,263 even	7,305 +7%	1,172 +2%	29,937 +3%
E. S. Cen.	543 —7%	213 —6%	652 +2%	3,515 +3%	535 —4%	422 +4%	3,314 even	2,973 +9%	474 +5%	12,641 +2%
W. S. Cen.	818 +1%	1,679 +5%	1,204 +7%	5,388 +1%	1,113 even	814 even	5,164 +2%	5,140 +7%	816 even	22,136 +3%
Mount.	547 +2%	507 +6%	423 +11%	1,355 +7%	477 even	289 even	1,783 +4%	1,977 +8%	329 +1%	7,687 +5%
Pacif.	857 +4%	426 even	1,418 +14%	8,222 +4%	1,295 even	1,202 +3%	6,720 +1%	6,072 +8%	1,437 +1%	27,649 +4%
U. S.	8,829 —1%	4,022 even	11,605 +14%	85,843 +1%	11,862 even	11,191 +2%	74,029 even	56,365 +8%	11,181 +1%	274,927 +3%





Regional Indicators

(Continued from page 11)

Farm Marketings ($ Mil.)

	Apr. 1955	Mar. 1955	Apr. 1954
South	$ 557	$ 476	$ 499
Other States	$1,426	$1,422	$1,382
United States	$1,983	$1,898	$1,881

Construction ($ Mil.)

	Apr. 1955	Mar. 1955	Apr. 1954
South	$1,056	$ 996	$ 937
Other States	$2,203	$1,921	$1,876
United States	$3,259	$2,917	$2,813

Mineral Output ($ Mil.)

	Apr. 1955	Mar. 1955	Apr. 1954
South	$ 565	$ 557	$ 546
Other States	$ 460	$ 454	$ 446
United States	$1,025	$1,011	$ 992

Manufacturing ($ Mil.)

	Apr. 1955	Mar. 1955	Apr. 1954
South	$ 4,849	$ 4,850	$ 4,605
Other States	$16,832	$16,783	$16,095
United States	$21,681	$21,633	$20,700

National Indicators

	Latest Month	Previous Month	Year Ago
Personal Income ($ Bil.)	$ 295.6	$ 294.6	$ 284.4
Ave. Weekly Earnings (Mfg.)	$ 76.11	$ 74.77	$ 70.20
Consumer Credit ($ Mil.)	$ 30,655	$ 29,948	$ 28,095
New Mfg. Orders	$ 25,870	$ 25,310	$ 22,251
Mfg. Inventories ($ Mil.)	$ 43,291	$ 43,483	$ 44,523
Trade Inventories ($ Mil.)	$ 35,182	$ 35,142	$ 34,951
Bank Debits ($ Mil.)	$158,289	$178,914	$154,759

	Latest Month	Previous Month	Year Ago
Ave. Weekly Hours (Mfg.)	40.7	40.2	39.0
Carloadings	3,433	2,621	3,093
Consumer Prices ('47-'49=100)	114.2	114.3	114.6
Retail Prices ('35-'39=100)	207.9	207.5	208.1
Wholesale Prices ('47-'49=100)	109.9	110.5	111.0
Construction Costs ('47-'49=100)	123.9	123.2	120.6
Electric Output (mil. kw. hrs.)	48,376	51,153	42,857

GOING PLACES *is always easier with Cities Service...*

Helpful directions to travelers on major turnpikes is just one small reason why the green-and-white emblem renews its welcome daily.

CITIES SERVICE

A Growth Company

Number 10 of a series

NEW AND EXPANDING PLANTS

COMPILED FROM REPORTS PUBLISHED IN THE DAILY CONSTRUCTION BULLETIN

ALABAMA

ANDALUSIA — Southeast Alabama Natural Gas Co. let contract to B & M Construction Co., Meridian, Miss., for office building and warehouse at $113,170. Stanley B. Echols, Birmingham, Archt.

ATHENS—Athco Mills, Inc., received bid from Chambers Lumber Co. at $71,350 for hosiery mill addition. Turner & Northington, Florence, Ala., Archts.

BIRMINGHAM—American Termite Control plans warehouse and office on Lomb Blvd. Allen Bartlett, Archt.

BIRMINGHAM — Dobbins Lumber Co. plans office building, 18th St. & 28th Ave., S. Horace M. Weaver, Archt.

BIRMINGHAM — Goldwire Products Co. received bid from G. Ganzini at $35,441 for warehouse, Goldwire Place, 6th Ave., S.

BIRMINGHAM — Gordon's Trans., Inc., Memphis, Tenn., let contract to F. R. Hoar & Son, Birmingham, at $114,145 for motor freight terminal. Greer, Holmquist & Chambers, Archts.

BIRMINGHAM—Todd Co., Inc., Rochester, New York, producers of insured checks and check-writing equipment, plan branch plant to double present facilities.

CALHOUN COUNTY — National Gypsum Co., Buffalo, N. Y., plans multi-million-dollar plant for manufacture of paper to cover gypsum wallboard and sheathing.

CHICKASAW - MOBILE — Warrior Gulf Navigation Co., Mobile, plan addition and alterations to office building. N. H. Holmes, Mobile, Archt.

FLORENCE—Stylon Corp., Milford, Mass., plans another plant to increase tile output.

HUNTSVILLE—The Huntsville Times let contract to Brice Bldg. Co., Birmingham, for newspaper building. Warren, Knight & Davis, Birmingham, Archts.

LE MOYNE—Consolidated Chemical Industries, Inc., San Francisco, Calif., G. L. Bond, president, to build $2,000,000 contact sulphuric acid plant.

SPOCARI—Lone Star Cement Corp., New York, plans expansion of plant.

ARKANSAS

DeQUEEN — Dierks Forests, Inc., F. H. Dierks, president, will add fifth cylinder to timber-treating plant.

LITTLE ROCK — American Machine & Foundry Co., New York, plan $1,250,000 plant for manufacture of bicycles.

MAGNOLIA — W. Shanhouse Sons, Inc., manufacturers of sports jackets, plan $60,000 expansion to plant.

MAGNOLIA — Southwest Unit Structures, Inc., producers of laminated wood trusses, plan $50,000 plant addition.

MARIANNA—Marianna Chamber of Commerce and Lee County Development Co. to construct $100,000 comb manufacturing plant for American Hard Rubber Co.

NORTH LITTLE ROCK — Kroger Company plans warehouse and office building to cost $1,500,000.

OKAY—Ideal Cement Co., Denver, plans $3,500,000 enlargement of plant.

RUSSELLVILLE—Bryant Poultry Co. to construct $500,000 poultry processing plant. Lawrence Bryant, president.

WARREN — Blenville Furniture Co., New Iberia, La., to rebuild burned Furniture Dimension Stock Mill.

WEST HELENA — Helena Garment Mfg. Co. of West Helena, plans addition to plant manufacturing women's dresses. V. A. Juengel, general manager.

WEST MEMPHIS — Choctaw, Inc., Memphis and Little Rock, manufacturers of concrete products, to construct $500,000 plant at West Memphis.

FLORIDA

ORLANDO—City let contract to Jarco Corp., Orlando, at $66,000 for addition to power plant. Robert & Co., 96 Poplar St., Atlanta, Ga., Archts.-Engrs.

GEORGIA

ATLANTA — Atlantic Steel Co. received bids for office building. Cooper, Barrett, Skinner, Woodbury & Cooper, Henry Grady Bldg., Archts.

ATLANTA — Benton Rapid Express let contract to Flagler Co., 305 Technwood Dr., N.W., for warehouse and terminal building.

ATLANTA — Grinnell Co. let contract to Strother-Barge Co., 189 Cain St., N.E., Atlanta, for office building and warehouse. Stevens & Wilkinson, 157 Luckie St., N.W., Archts.

ATLANTA—Southern Dairies, Inc., Plant Engineer, 593 Glen Iris Drive, N.E., received bids for mechanical work for alterations and additions to dairy products plant, 575-593 Glen Iris Drive, N.E. Herbert A. Rawlins, 33 Pryor St., N.E., Archt.

CHAMBLEE — Allied Van Lines received bid from McDonough Construction Co., 7 Baltimore Place, Atlanta, for office and terminal building. Ayers & Godwin, 211-15 Bona Allen Bldg., Atlanta, Archts.

COLUMBUS—Marimar Corp. received bid from D. E. Newsome, Box 1056, at $154,900 for recreation center. E. Oren Smith, 1236 Wildwood Ave., Archt.

DEKALB COUNTY — Southern Bell Telephone & Telegraph Co., 805 Peachtree St., Atlanta, received bids for East Group plant work center.

DUBLIN—J. P. Stevens & Co., Inc., Milledgeville, Ga., let contract to Daniel Construction Co., Greenville, S. C., for Dublin Plant No. 2.

MACON—Armstrong Cork Co., Lancaster, Pa., received bids for Fiber Board Plant extension at Macon.

SAVANNAH — Johns-Manville Corp., New York, A. R. Fisher, president, manufacturers of building products and friction materials, plan asphalt roofing plant and warehouse.

WARNER ROBINS—Southern Bell Tel. & Tel. Co., 805 Peachtree St., N.E., Atlanta, received bids for plant work center and No. 1 dial office building. W. Griffith Edwards and Associate, Robert W. Gibeling, 157 Peachtree St., N.E., Atlanta, Archts.

New and Expanding Plants
Reported in June 1955
89
First Six Months of 1955
598
First Six Months of 1954
670

LOUISIANA

LAFAYETTE—Board of Trustees received bid of $120,315 from Austin Building Co., Box 1590, Dallas, for power plant building revisions and additional construction.

LAKE CHARLES—The Southern Bell Telephone & Telegraph Co., New Orleans, La., let contract to David B. Miller & Co., Inc., P. O. Box 425, Lake Charles, for new concrete block exchange building.

NEW ORLEANS—Cook Truck Lines, Inc., received bid from Lionel F. Favret Co., Inc., 937 Gravier St., at $169,770, for new freight terminal building at 6500 Gentilly Road. Paul Klingensmith, St. Louis, Mo., Archt.; and Wayne M. Stoffle, 730 Gravier St., New Orleans, Assoc. Archt.

NEW ORLEANS — Firestone plans retail building, located on Square 247, bounded by Edinburgh and Dublin Sts., and S. Carrollton & Palmer Aves. Diboll-Kessels & Assocs., 637 Pere Antoine Alley, Archts.-Engrs.

RUSTON — City let contract to W. C. Salley, Box 24, Monroe, La., at $322,422, for new Lincoln Industries, Inc., Plant Building. Rivers & Heuer, 513 Ouachita National Bank Bldg., Monroe, La., Archts.

MARYLAND

BALTIMORE — The Bradley Realty Co., Baltimore & Pine Sts., received bids for warehouse and delivery station, 4311-4401 Erdman Ave. Abbott, Merkt & Co., 10 E. 40th St., New York, Archts.

BALTIMORE—Chesapeake & Potomac Telephone Co. plans building, 4505 Leeds Ave., Arbutus. Taylor & Fisher, 103 W. Hamilton St., Archts.

BALTIMORE—Davison Chemical Co., Davison Bldg., let contract to Consolidated Engr. Co., 20 E. Lexington St., Baltimore 2, at $400,000, for building at 5500 Chemical Road.

BALTIMORE—General Motors Corp., Detroit, plans expansion of Chevrolet & Fisher Body factories on Broening Highway, to cost approx. $500,000.

BALTIMORE — Revere Copper & Brass, Inc., 1301 Wicomico St., received bids for shipping room building No. 72.

BALTIMORE CO. — Transport Mfg. & Equip. Co., Kansas City, Mo., let contract to MacLeod Constr. Co., 619 S. Caton Ave., Baltimore 20, at $200,000, for freight terminal building; and at $100,000 for Overall Building, on Sulphur Spring Road. Harry L. Warner, Archt.

BALTIMORE—United Iron & Metal Co., Catherine St., and B&O Railroad, let contract to Piracci Construction Co., 2552 Woodbrook Ave., Baltimore 17, at $30,000, for building and pump house.

HAWKINS POINT — The Glidden Co. let contract to Whiting-Turner Constr. Co., 305 National Marine Bank Bldg., Baltimore 2, for industrial plant.

MIDDLE RIVER — Glenn L. Martin Co., Middle River, received bids for repair of beams and columns, "C" Building.

MIDDLE RIVER — The Glenn L. Martin Co. received bids for addition to engineering building; new cafeteria, Plant 1.

MIDDLE RIVER — The Glenn L. Martin Co. let contract to The Davis Constr. Co., 320 W. 24th St., Baltimore 11, at $261,650, for addition to Personnel Bldg., Plant 1.

TOWSON—Bendix Aviation Corp., Edward K. Foster, vice-president, plans ultra-modern engineering building; estimated cost $2,000,000.

WESTMINSTER — Newman Press and Book Shop, Carroll Theater Bldg., Westminster, received bids for warehouse and office on Route 140.

MISSISSIPPI

BATESVILLE — City received bid from Graves Bros. Lumber Co., Batesville, at $99,500, for addition to plant building of Batesville Manufacturing Co. Pritchard & Nickles, Tunica, Miss., Archts.-Engrs.

BROOKHAVEN—Board of Supervisors of Lincoln County received bids for factory building for Lincoln County. John Bishop Seavey, 524 N. Whitworth Ave., Archt.

CANTON—Board of Supervisors of Canton received bids for sewing plant. Walk C. Jones, Jr., Archt.

IUKA—Board of Supervisors of Tishomingo County let contract to Kimberly Bros. Constr. Co., at $277,579, for industrial plant. John Charles Wheeler, 501 Chamber of Commerce Bldg., Nashville, Tenn., Archt., and B. A. England, Jr., 616½ Fillmore St., Corinth, Assoc., Archt.

MISSOURI

ST. LOUIS — Chase Brass & Copper Co., Louis J. Vogler, manager, 3815 Market St., received bids for warehouse and office on North side of McRae Ave., East of Kingshighway. Rathmann, Koelle & Carroll, 316 N. 8th St., Archt.

GALVANIZING
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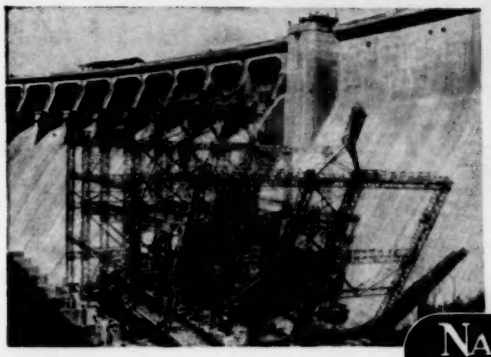
METALPLATE CO.
757 N. 44th St. Birmingham, Ala.



THE Nashville Bridge Company will gladly quote on structural steel requirements anywhere in the South and Southwest. Our skill in the fabrication and erection of intricate lattice structures is well known. We are particularly qualified to supply the Power Distributing Industries with transmission towers and switchyard structures—hot-dip galvanized after fabrication. Fabrication and erection of both steel and machinery for movable type bridges is a specialty. Look to Nashville for simple steel requirements as well as intricate structural jobs.

Plants and offices in Nashville, Tennessee and Bessemer, Alabama. We also own and operate the Bessemer Galvanizing Works—largest galvanizing plant in the South.

NASHVILLE BRIDGE COMPANY
NASHVILLE, TENN. — BESSEMER, ALA.

NEW AND EXPANDING PLANTS

ST. LOUIS—Chevrolet St. Louis Division of General Motors Corp., 3809 N. Union, let contract to J. S. Alberici Const. Co., 1550 Irving Ave., for plant addition, superstructure, 3809 N. Union. Albert Kahn Assoc., 345 New Center Bldg., Detroit, Mich., Archts. & Engrs.
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ST. LOUIS — Louise Crossett & Harriet Burkart, 5000 N. 2nd St., let contract to Willingham Constr. Co., 5245 Northrup St., for printing plant addition, 5211 Northrup St., to cost about $35,000.

ST. LOUIS—International Shoe Co., Edgar E. Rand, president, 225 W. 34th St., New York, plans expansion program.

ST. LOUIS—Nieman Bearing Co., 2833 Locust St., let contract to Wm. H. & Nelson Cunliff Co., 3320 Lindell Blvd., for salesroom and warehouse, 2721 Washington Ave. Fred S. McNeill, 3320 Lindell Blvd., Archt.

NORTH CAROLINA

ACME — Riegel Carolina Corp. received bids for addition to paper plant. J. E. Sirrine, Greenville, S. C., Archts.-Engrs.

ASHEVILLE—Earle Chesterfield Mill Co. let contract to Z. B. Robinson Constr. Engr. Co., Asheville, at $24,000, for mill additions. Six Associates, Inc., Asheville, Archts.

ASHEVILLE—R. Gumpert, Inc., received bids for warehouse. Wm. E. Brackett, Jr., Archt.

CHARLOTTE — Helms Motor Express, Charlotte, received bids for terminal and office building. Walter W. Hook & Assocs., Archt.

CHARLOTTE — Kimbrell's Furniture Co. let contract to Young Constr. Co. at $69,979 for warehouse.

CHARLOTTE—Miller Motor Express, Wm. W. Miller, Jr., president, let contract to Flowe Bros. Constr. Co., Charlotte, for new terminal on Wilkinson Blvd. David McIntosh, Charlotte, Archt.

CLINTON—Clinton Development Corp. received bids for manufacturing plant.

DUNN—Dunn Investors, Inc., Emmett Aldredge, president, plan garment manufacturing plant.

GASTONIA — Burlington Mill Corp., Greensboro, N. C., let contract to Fiske-Carter Constr. Co., Spartanburg, S. C., at $285,775, for additions and renovations to Burlington Mill Flint Plant No. 1.

HICKORY—General Electric Co. let contract to J. A. Jones Construction Co., Charlotte, for transformer plant. Robert & Co. Associates, 96 Poplar St., N.W., Archts.-Engrs.

HIGH POINT—Globe Parlor Furniture Co. plan manufacturing building on Prospect Road.

NORTH CAROLINA COUNTIES — Home Telephone Co. received bids for REA Lines, Proj. 508-A.

RALEIGH — Commercial Printing Co. received bid from Clancy Construction Co., Raleigh, at $55,213, for building. F. Carter Williams, Raleigh, Archt.

SMITHFIELD—Smithfield Industries, Inc., let contract to Textile Elec., Spartanburg, S. C., at $18,995, for cutting and sewing plant for Jerold Corporation. Lowenstein-Atkinson Assocs., Greensboro, N. C., Archts.

SOUTHERN PINES—Southern Pines Telephone Co. received bids for building addition, Sandhill Telephone Co. Thos. T. Hayes, Jr., & Assocs., Southern Pines, Archt.

WINSTON-SALEM — Oldtown Telephone System, Inc., Rt. 1, received bid of $71,711 from Wilson-Covington Constr. Co., Winston-Salem, for telephone building (REA Proj. NC 502). Stinson & Arey, Winston-Salem, Archts.

OKLAHOMA

ADA—Ideal Cement Co., Kansas City, Mo., plans $55,000,000 expansion, which includes a new plant alongside present one at Ada, to cost $6,500,000.

LINDSAY — Phillips Petroleum Co. and Magnolia Petroleum Co. plan gas extraction plant.

SOUTH CAROLINA

CHARLESTON—Pearce-Young-Angel, Inc., R. Roy Pearce, Vice-pres., Fairgrounds, Columbia, S. C., plans warehouse to cost between $400,000 and $500,000, on Meeting St. Road.

CHESTER — The Borden Food Products Co., New York, let contract to McDevitt & Street, Charlotte, N. C., at $59,088, for warehouse.

CHESTER—Fuller Shirt Co., Inc., Wm. T. Fuller, president, plans shirt factory to cost approx. $150,000.

PICKENS (nr.) — Pickens Electric Mfg. Co., a division of Sangamo Electric Co., Springfield, Ill., to erect new plant. C. H. Lanphier, president.

TENNESSEE

CALHOUN — Bowater Paper Corp., Ltd., Chester, England, plans installation of third newsprint machine at Calhoun, to cost $25,000,000.

CHATTANOOGA—Quaker Oats Co. plans $250,000 poultry feed mill on site of present plant.

LOUDON — Visking Corp., Chicago, plan cellulose casing plant, to cost several million dollars. Howard R. Medici, president.

NASHVILLE — Ferro Corp., Robert A. Weaver, Chairman, Cleveland, Ohio, plans to double facilities of glass fibre division.

TEXAS

ABILENE — Independent Wholesale Grocery Co. received bid from C. B. Oates Constr. Co., Box 1171, at $93,813, for warehouse and office building. Tucker & Lindberg, 161½ Cedar St., Archts.

AMARILLO—Neil & John Yows let contract to Page & Richardson, Box 1004, at $76,632, for truck terminal at Third & Hayes Sts. Clayton B. Shiver and Russell Megert, 1011 Fisk Bldg., Assoc. Archts.

ATHENS—Athens Brick Co., Inc., H. B. Sampson, president, Tyler, Texas, plans $4,000,000 brick plant on 31 A Tracks.

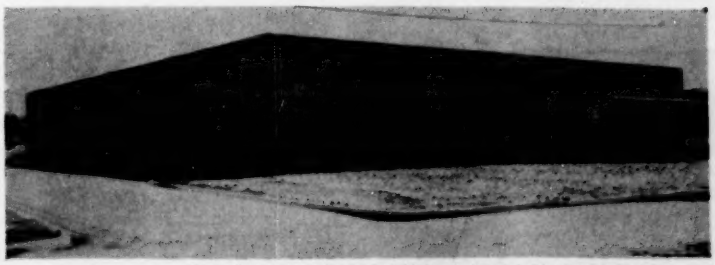
AUSTIN — Southwestern Bell Telephone Co. received bids for Hickory "2" Dial building, Spec. No. 0825, at Cumberland Rd. & Eadons Drive.

CLEVELAND — Southwestern Bell Telephone Co. let contract to H. A. Klerks & Co., 6505 Foster Place, Houston, for dial building, N.E. cor. Bonham Ave. & Crockett St.

CORPUS CHRISTI — Columbia-Southern Chem. Corp., Lawrence Drive, plan locker room addition. Ben E. Christian, 921 Ocean Drive, Archt.

(*Continued on page* 61)

TRINITY INDUSTRIAL DISTRICT



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For information about the Trinity Industrial District consult your real estate broker or . . .

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LITTLE GRAINS OF SAND

"Little drops of water, little grains of sand,
Make the mighty ocean, and the pleasant land."

Self Defeating. An unfortunate concept has come to full flower in this country in recent years which completely ignores the fundamental economics of a wage rate. This concept calls for uniformity in all wages for all industries and requires that any increase any where and for any reason be matched promptly by all industries and all firms. It also requires steady and substantial increases regardless of the effect on employment, profits, industries, and communities.

The basic truth which this "liberal" philosophy ignores is that a wage rate that goes contrary to the economic trends in an industry results in unemployment and reduces future job opportunities. The market place still evaluates the product of any industry, and places its own economic price tag on a worker's time.

The automatic effort to adjust to increased wages is toward more and more and better machines. Automation is just the modern term to describe advanced mechanization.

The CIO in its drive for an annual wage gave as one of its reasons the fear of automation. Ironically enough, the new wage rates will spur efforts to cut costs and minimize lay-off expense by increased investment in plant and equipment in order to reduce dependence on labor.

As Victor Riesel says: "The auto companies now will seek to protect themselves by assuming responsibility for as small a work force as possible. . . . Automation will be speeded far more than even Reuther envisioned—so that new men need not be hired."

The coal industry has provided a case in point. The October 1, 1952, coal wage contract has often been described as "100 per cent wrong in its timing." What the industry really needed at that time was a cut in delivered costs, and, in its efforts to survive red ink in the months and years that followed, the coal industry invested in new machines, opened new lower-cost properties, and produced more coal with less men. In fact, the effect of "automation" in the coal mines has been almost revolutionary.

AFL-CIO. The achievement of unity among the separate national unions is a development which the public can ill afford to regard with indifference or equanimity. Merging and unification are no more than the latest stages in a process of the accumulation of power by private organizations. Less than ten years ago, when the AFL and the CIO seemed to be hopelessly and permanently divided, Congress passed, over the President's veto, a revised statute, the Taft-Hartley Act, whose principal purpose it was to curb the growing power of labor unions. Since 1947, when that law became effective, union membership and the authority unions arrogate to themselves have continued to grow. It is one of the puzzles of our recent political and legislative history that a community which has traditionally been so sensitive to the threat of power in private business should appear so indifferent to the rise of a still greater private power in organized labor.

> Free enterprise, in order to flourish, needs venture capital to nurture it. If venture capital is confiscated by unfair taxation, free enterprise will wither and eventually die.

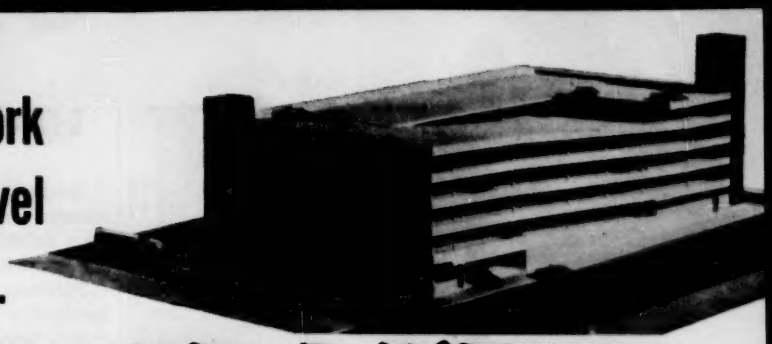
Publicize Them. The one sure way to stop a secondary boycott is to see that all of the facts receive full publicity. The employer who asks that the boycott against him be kept secret is playing right into the hands of the union which employs it.

How does publicity help? Union labor officials know that the secondary boycott is an unfair economic weapon. They abhor the public stigma that accompanies their use of this technique. The spotlight of publicity surrounding boycotts thrusts the entire organized labor movement into a bad light, and an angered and aroused public will demand fair play.

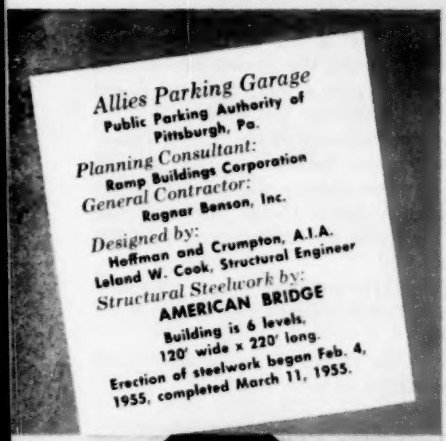
Newspapers across the country recently printed an account of an AFL teamsters secondary boycott against the Galveston Truck Lines, a small firm operating out of Houston, Tex.

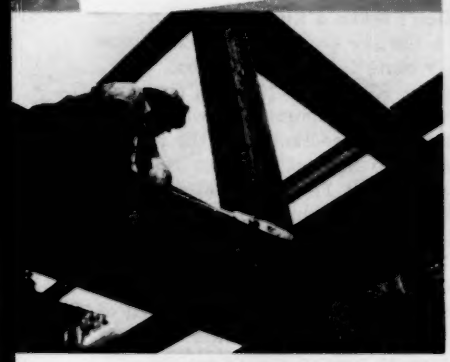
(*Continued on page* 18)

700 Tons of Steelwork for this unique 6-level rampless garage....



ERECTED IN JUST 5 WEEKS!





Using high tensile bolts for field connections, AMERICAN BRIDGE makes quiet, speedy work of large mid-town structure

The Parking Authority of the City of Pittsburgh is answering the demand for new and better parking facilities by building one of the most unusual structures of its type to be found anywhere.

And by using steel-frame construction *field connected with high strength bolts*, the job is being handled so speedily and so quietly that folks on the street and in neighboring buildings are scarcely aware that a big new building is being constructed in their midst.

Erection started February 4, 1955 and was completed March 11, 1955 – an elapsed time of just 5 weeks!

Located on the corner of the broad Boulevard of the Allies and busy Smithfield Street in the heart of the Golden Triangle, the new garage is 120' wide x 220' long with six levels for drive-in parking. *The slightly tilted floors do away entirely with ordinary ramps.* It is designed with a center section 120' x 125' on slope and two level end sections 120' x 47'6". All connections were made with high tensile bolts. The 700 tons of structural steel framework was fabricated and erected by American Bridge.

The fast, uninterrupted and unusually quiet erection of this modern parking garage provides another strong argument in favor of steel-frame construction and *bolted field connections* for buildings of any type and size. For American Bridge crewmen can make tight connections with high-strength bolts as efficiently and speedily as less skilled personnel can handle the more common methods.

For detailed information regarding your requirements, please contact the office nearest you. Our engineers welcome an opportunity to confer with you.

AMERICAN BRIDGE DIVISION, UNITED STATES STEEL CORPORATION, GENERAL OFFICES: 525 WILLIAM PENN PLACE, PITTSBURGH, PA.

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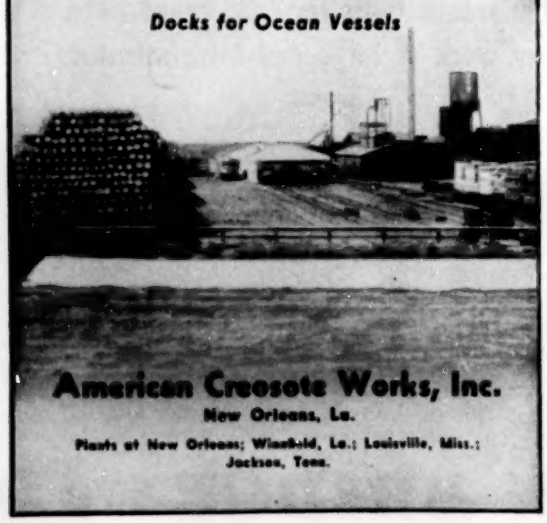
CREOSOTED
Piling, Poles, Lumber, Cross Arms, Cross Ties
Also Penta- and Salt-Treated Lumber
Decay and Termite Proof
Docks for Ocean Vessels



American Creosote Works, Inc.
New Orleans, La.
Plants at New Orleans; Winnfield, La.; Louisville, Miss.; Jackson, Tenn.

LITTLE GRAINS OF SAND

(*Continued from page* 16)

Results were quick in coming. The day before attorneys formally applied for the injunction, the teamsters halted the boycott and agreed not to harass the small truck line.

Publicity, based upon the facts, is one of the best methods to fight a union's attempt to gain privileges it cannot win fairly and legally. A secondary boycott can't be beaten by keeping it quiet. How do we stop them? Publicize them.

State Ownership. Britain's state-owned transport system finished $33,320,000 in the red last year, its annual report showed. It was the second nationalized industry in a week to report a loss. The coal board reported a deficit of $10,650,000 last week.

Sir Brian Robertson, chairman of the British Transport Commission which runs the railways, bus lines and waterways, told a news conference another deficit this year is "inescapable." A recent 17-day railway strike was estimated to have cost the commission up to $42 million in revenue.

The 1954 loss brought the commission's accumulated deficit since transport was nationalized seven years ago to $109,200,000.

The report showed the railway's net traffic income fell by $50,960,000 compared with 1953.

Two Wrongs Don't Make a Right. When you buy a railroad ticket a ten per cent Federal tax—it was formerly fifteen per cent—is added to the cost.

But now comes Mr. Richard F. Mitchell, chairman of the Interstate Commerce Commission, with a suggestion that it may become necessary for the Federal Government to make up the deficit which railroads incur in carrying passengers. This is estimated at from $400 million to $600 million annually.

Cases where Government policies meet themselves coming back are by no means rare. But the idea that the Treasury should regard the railroads both as a source of tax revenue and as an industry in need of subsidy ought to take some sort of a prize.

And while we have no wish to unduly criticize Mr. Mitchell, it seems to us that the one paradox does not exhaust the inconsistencies in his proposal.

He says the railroads are still treated as a monopoly while in fact they are competitive with other forms of transportation; in other words too much regulation. Very well, but almost surely a Government subsidy would result in more and not less Government interference.

Stock Market Inquiries. Common stock prices, as measured by the inclusive index of the Securities and Exchange Commission, advanced by 46 per cent during 1954.

Corporate profits after taxes, the Department of Commerce reports, were 3 per cent smaller last year than in 1953.

There may well be good and sufficient reasons for this divergence between the movement of stock prices and of corporate profits. It may have arisen from a

LITTLE GRAINS OF SAND

previous gross undervaluation of corporate earning power. Or it may discount a sharp rise in profits expected in the near future.

One function of Government is now held to be the promotion of steady growth of the economy, without the periodic interruptions caused by depressions in the past. Major swings in the stock market are thus a proper subject of inquiry and study, both by the executive branch of government and by Congress.

A better understanding of the reasons for stock price movements and their consequences for the economy can help to achieve the objective of steady economic growth without serious depressions.

Amazing Growth. The electric utility industry is grinding out new records of growth and performance—almost any week, practically every month, and each year without fail.

America, going electric by bounding leaps, is pumping new vitality into a score of related industries.

As to 1955 and the near future, Harold Quinton, President of the Edison Electric Institute, said investor-owned and governmental utilities together are scheduled to add 7.8 million kilowatts in 1956, 5.6 million in 1957 and 7.7 million in 1958, on top of a record 13 million this year. Upward revisions are likely in the later years, since the survey is based on generating equipment on order as of last April 1.

New capacity in recent years has included a greater percentage of thermal plants as against hydro-electric. In 1945, hydro capacity represented 29.8 per cent of the total installed, but the proportion has declined steadily during the postwar period. As to the end of 1954, only 22.6 per cent—23,185,000 kilowatts—was hydro.

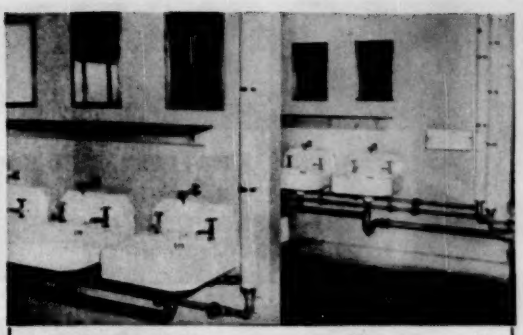
Death of a Monopoly. The report of the President's Cabinet Committee on Transportation begins this way:

"Within the short span of one generation this country has witnessed a transportation revolution . . . As late as 1920, the railroads held a virtual monopoly of intercity transportation with the exception of areas served by water. In striking contrast, there is available today a wide selection of transport methods for the movement of goods and people from one place to another with economy, expedition and safety."

This is so obvious that you almost wonder why it is necessary to say it. Yet we think it took some courage, for it leads to very obvious conclusions that involve basic changes in our transportation policy. And basic changes always meet the obstacle of political entrenchment.

Since the new competition "for all practical purposes has eliminated the monopoly element," the committee urges that we quit treating the railroads as though they were a monopoly. This means giving back a large measure of their freedom to fix their own rates and adjust their traffic patterns to meet this new and everchanging competition. That should have been done long ago. It certainly should be done now.

Wall Street Journal



Ruberoid Stonewall Board

KEEPS MAINTENANCE COSTS DOWN

The walls of this plant washroom prove again the economy of Ruberoid Stonewall Board for in-plant partitioning. Made of asbestos-cement, Stonewall is ideal for wall surfaces where excessive dampness and corrosion shorten the life of other materials.

Industrial maintenance men everywhere are learning that it pays to use fireproof, rot-proof Stonewall Board for all interior partitioning. Since it never needs painting—no matter what its location—Stonewall means big maintenance savings year after year.

Investigate the benefits of Stonewall Board yourself. Write for details about its low cost installation and no-cost maintenance.

The RUBEROID Co

500 Fifth Ave., New York 46, N. Y.

ASPHALT AND ASBESTOS BUILDING MATERIALS

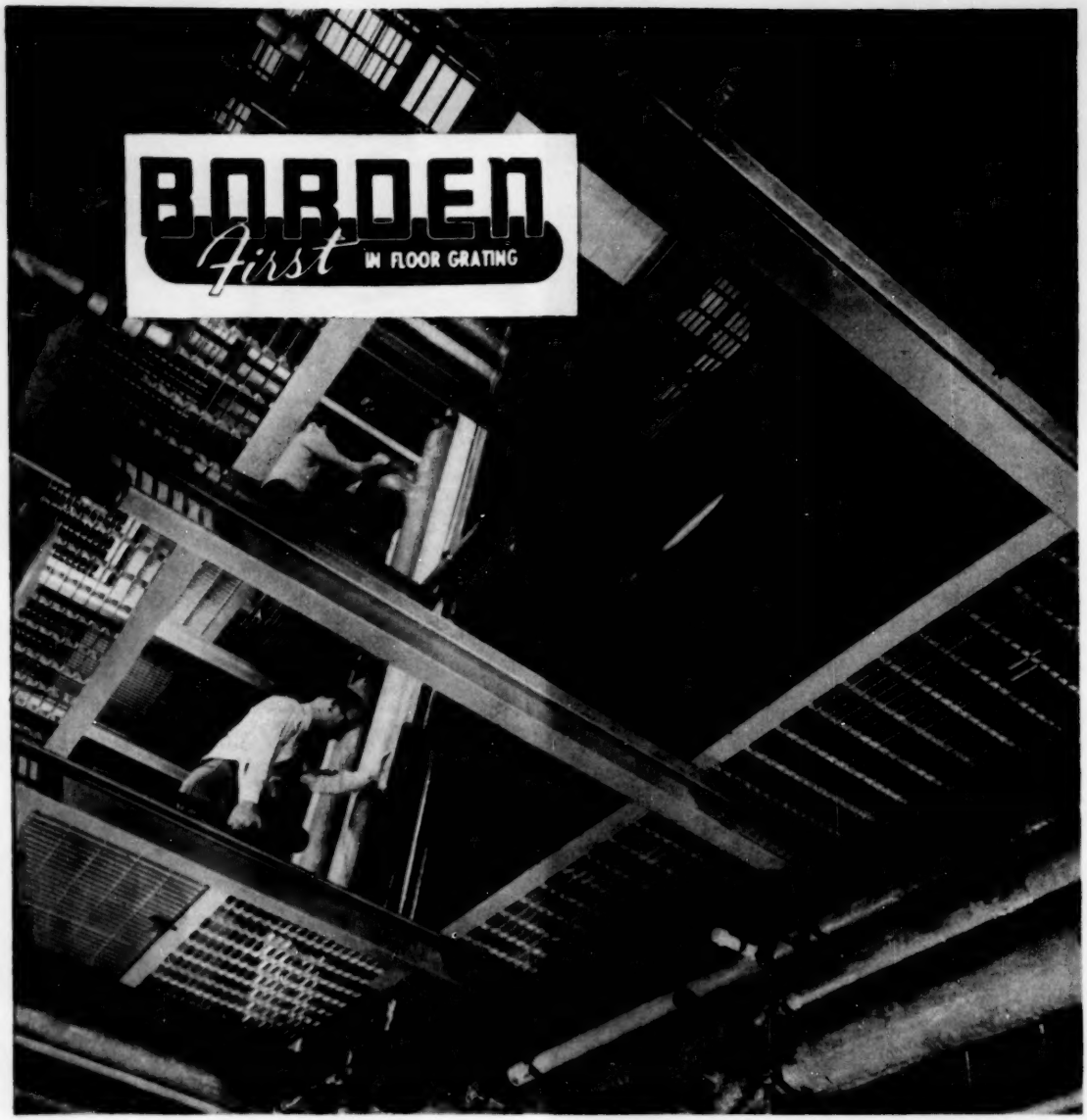
ATTALA COUNTY — KOSCIUSKO, MISS.

HAS SURPLUS LABOR—

WANTS A FACTORY

THESE ARE SOME OF THE FACTS CONDENSED FROM A SURVEY OF OUR CITY AND COUNTY.

(1) At a recent survey for an area of 35 miles we had over 5000 women from age 18 to 40 years who wanted work (white women).
(2) Labor is all native.
(3) Labor troubles—only one strike in 50 years.
(4) Threatened strikes—none.
(5) Factory site location easy to acquire at small cost.
(6) Residence cost reasonable—range $5 to $12,500.
(7) Rental cost—average $50 to $60 monthly.
(8) City streets paved.
(9) Highways north, south, east and west (paved).
(10) Tax Assessments inside city—5.90. Outside city—2.50.
(11) Two banks—operating—No. two to open soon.
(12) Property assessment city $6,531,886.00
Property assessment Dist. No. 1 ..... $6,653,310.00
Property assessment county $11,180,880.00
(13) Elevation 440 feet in the north—280 feet in south.
(14) Recreation—several bodies of small lakes for fishing—golf clubs—tennis courts, etc. on Nathez Trace Parkway. Have municipal park.
(15) Churches—10 churches of 8 different faiths.
(16) Population radius 15 miles estimated 32,000. City estimated 9,000.
(17) Population 100% native born.
(18) 22 industries in city.
(19) Electric power—ample source Miss. Light and Power Co.
(20) Ample natural gas supply.
(21) Water ample—for additional water depth necessary 700 ft.
(22) Paid Fire Department.
(23) A friendly and co-operative people.
(24) Located in center of Mississippi.
(25) Mississippi B A W I permits industry to locate in Mississippi without investing in lands and buildings.
(26) If interested please investigate.



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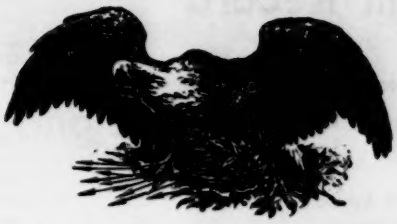


"What Enriches the South Enriches the Nation"

Mischief of Congress

By Seth Axley

Winning a partially-"guaranteed wage" throws a floodlight on the mischief Congress did when it recognized the "right" to strike and gave unions monopoly power in bargaining. There is no moral right to strike. In giving the legal right Congress chose force over orderly processes because it was unwilling to accept the verdict of a wage set by worker competition. What troubles now flow from that fallacy, that by using enough force workers can get any wage they please! By its labor laws Congress made two classes of citizens, ordinary and select.

To strike is to coerce in collusion. No ordinary citizen has that right. To grant it to any citizen is to license holdup. By collective bargaining unions impose their will by force. Being unchecked, they have grown as big as the government.

To see our error, we need only recall that a right implies a corresponding obligation, but for the right to strike a union assumes no obligation. There is another way to tell. A government of free people is not the source of rights. Only despots grant rights to slaves.

With the right to strike, the "guaranteed wage" is merely one demand unions will seek. They will next demand a six-hour day and a four-day week. But economic law will go on grinding. The return to capital will rise to compensate for these new costs, by a rise in prices and by thinning out employers, thus concentrating output in units strong enough to off-set union favors. But only a people who are blind will let a fallacy live that long. Before suffering to that extent they will see certain truths.

One is that when a boss hires a man, he does not guarantee a job. He obviously cannot, because he cannot foresee the whims of his customers. In demanding that its wage be gauranteed, a union in effect is asking ordinary citizens to support it.

The other truth which we will discover is that most of our economic troubles spring from the managed economy. The managers need votes, so they need to grant favors. Therefore they adopt the notion of a "just" or managed wage and grant workers the tools with which to get it. Since getting it throws a monkey wrench into the economic gears, the managers need an irredeemable currency, one that will stretch to cover every need.

Because Congress once abdicated, a mistake was made. So far, Congress has declined to rectify it. Meanwhile, it has corrected what the stretched currency has done to it. Congress has doubled its own pay.

Reprinted from the Wall Street Journal of June 23, 1955, where it first appeared as a Letter to the Editor.

Market Resumes Advance To Set New High Record

Favorable investment psychology a contrast to the pessimism existing in June 1949 when the great bull market began

By Robert S. Byfield
Financial Editor

At this writing the Dow-Jones Industrial Average has risen above the 460 mark and the advance which had shown some hesitation over a period of about two months has been resumed. Last month we wrote that we believed the actions of the money managers in Washington had begun to exercise some influence. We still feel that the warnings which have been sent out cannot be ignored. Margin requirements which have been raised several times could be tightened once more. The raising of the rediscount rate last Winter had only a temporary result insofar as quotations for industrial common stocks are concerned.

The fact that the speculative markets have not reacted more actively to the imposition of existing credit controls bears witness to the tremendous forward momentum of the bull market which is now over six years old. We cannot answer the question as to whether Washington is actually willing to go further at this time or whether it is willing to let stock quotations take their own course. All of the above does not mean that money rates have not hardened. The contrary is the fact and we see evidence that mortgage money is getting tighter. Some of the rates paid to savings bank depositors in New York State have now been advanced to 3%, a figure not seen in many, many years. Furthermore, loans to brokers for other than carrying government bonds have risen once more from 2¾% to 3% thereby probably forecasting an increase in what is known as the "prime" rate. The high grade bond market has been none too good and the municipal market has become somewhat waterlogged because of the heavy offering of revenue bonds in recent weeks and the prospect that additional financing will continue on a heavy schedule. Bond prices could reverse themselves but if they do not do so over a period of months then the gap in the yield from high grade bonds and high grade comcon stocks will continue to narrow.

On the other hand, there are continuing evidences that industry will spend huge sums of money for construction of plant, equipment and facilities at the very high rate which has been characteristic of the business scene for some years. It is difficult to foresee an industrial slump while business management is optimistic enough to risk further expansion such as it is now doing on a large scale. As measured statistically, our prosperity has been at an all-time high plateau for months and as far as any one can see it will not slump in the indefinite future. This does not mean, however, that common stocks can continue to rise as they have recently. Many issues have discounted not only current earnings but earnings on an increasing scale for one, two and even three years in the future. It would be trite to say that the stock market is "selective," since it always is in bear markets as well as in bull markets. The blue chips continue to be favored for investment by individuals and institutions. There are many laggards, and we could list dozens of shares which not only have not risen since the end of 1954 but have actually declined. It is among such stocks that the investor must now look for shrewd commitments, for only a continued rapid growth in earnings could justify the yields which are under 3% now offered by many blue chips. Since dividend returns from these issues are taxable they compare unfavorably with tax free yields of between 2.50% to 2.75% and in some cases even higher, obtainable from municipal and revenue bonds.

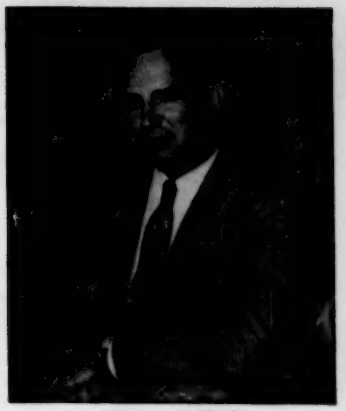
As we have often stated in this column, it would be fruitless to attempt any prediction as to the date when the present bull market will have reached its peak. However, it might be well to review the conditions which existed a little over six years ago in June 1949 when most observers agree the present long advance in common stock quotations began. Sometimes there is much to learn from an examination of background conditions. In the July 1949 issue of THE MANUFACTURERS RECORD we noted that the industrial stock averages finally broke through their 1946, 1947, 1948 low levels. There had been a long stalemate in the stock market and dullness prevailed on the exchanges. We felt that one of the principal reasons for the gloom in the financial centers of the country was the decline in steel operations and the main topic of conversation was how deep the then current recession or setback was likely to be. We believed that it was unwise to compare the conditions as they then existed with previous retreats in business prospertiy such as had occurred in 1920-1921, 1929-1933 and 1937-1938. In those previous declines there had been many maladjustments in our economy, some of which were conspicuously absent in 1949. We admitted that industry as a whole was carrying substantial inventories but we expressed the opinion that they were not unwieldy. There had been no undue expansion of credit either for the purchase of securities or commodities and the banking structure was sound. We generally were frankly skeptical that a deep penetration of the postwar low prices for common stocks would occur. We believed that the very substantial population growth which had occurred since 1935-1939 must be reckoned with and that there had been a spectacular rise in the standard of living in the previous 10 or 15 years.

Investor psychology was generally at a very low ebb. The recession which characterized our economy in June 1949 had been discounted for years by the decline of the stock market as far back as the Fall of 1946. Few observers seemed to be cognizant of the important fact that there is a limit to the number of times the same recession may be discounted in advance. The lack of confidence among business men and investors was reflected by the low price-earnings ratio of leading common stocks. The Dow-Jones Industrial Average reached the 161-165 level in June 1949 not far from the low marks of the preceding three years. The earnings on the Dow-Jones stocks for 1949 were $23.54 and the indicated price-earnings ratio therefore was slightly under 7 times. Dividend pay-out for the year was $12.79 and the yield on this basis for the Dow-Jones stocks was 7.91%. In addition to the blue chips which comprised the leading averages, shares of lesser quality were available at even more handsome yields. There were not only hundreds of good investment values available for purchase but many obvious "bargains."

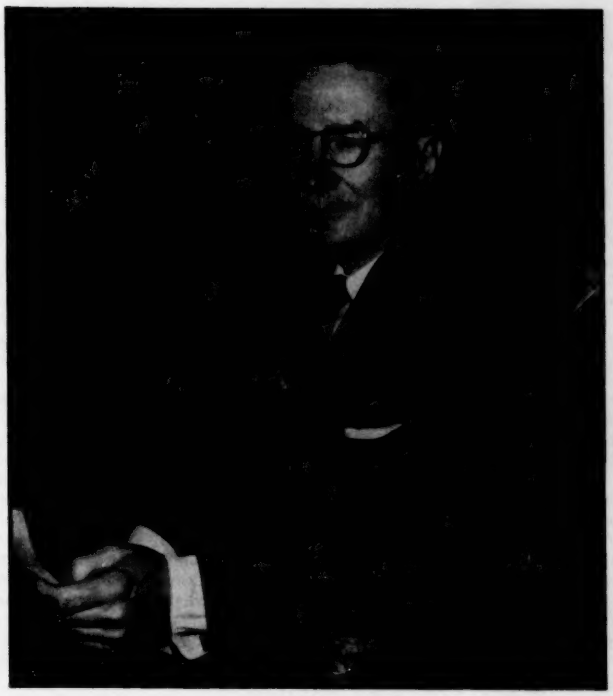
In July 1955 conditions were almost the reverse of those which existed in June 1949. Then good common stocks had been undervalued for years. Many observers had felt that they should have moved upward long before they did. However, the condition of near-lethargy existed until it became a kind of financial way of life. Nevertheless, by the close of 1949 stocks finally moved out of the rut in which they had found themselves and the great advance began.

Today quotations for many high grade stocks have risen far higher than believed possible. The upward movement since September 1953 has caused many skeptics to believe that a reversal could come at any time. At present levels high prices have become chronic just as low prices were chronic for much of the 1946-1949 era. If the immediate post-war period of gloom and doubt teaches us anything it is that a given set of conditions in the financial markets may last longer than expected. Sooner or later a reversal always comes but it probably will not become an actuality until most observers have given up all expectation of its arrival.

Kerrigan Iron Announces New Bridge Flooring Division



Harvey F. Neel



G. G. Greulich

Kerrigan Iron Works, Inc., fast expanding grating manufacturer, with three plants in Nashville, Tennessee, and general sales offices at 274 Madison Avenue, New York City, is opening a new Bridge Flooring Division.

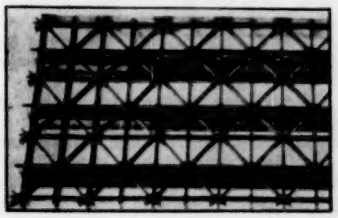
Philip Kerrigan, Jr., President, disclosed that G. G. Greulich (Pittsburgh), nationally known engineer-designer, has been retained as consultant for a new four-way grid open steel bridge flooring which Kerrigan will produce. Kerrigan acquires rights to fabricate and market Greulich's bridge floor design which is distinctive in that it allows the use of deeper and thus much stronger cross bars due to the triangular top grid system . . . with grid beams spaced 7½" apart instead of the usual 6". This effects economies in field welding as approximately 20% fewer welds are necessary for attaching the grid to the main bridge stringers. The grids are manufactured in lengths required up to 36 ft. and 7 ft. 3 inches standard widths, instead of the usual 4 ft. to 6 ft. widths, thus reducing the number of units to be handled in the field as well as making a proportionate reduction in the number of lines of splices between adjacent grid units. The width selected also results in economy of loading and transportation, utilizing almost the entire bed widths of trucks or gondola railroad cars, except for ample allowance for blocking.

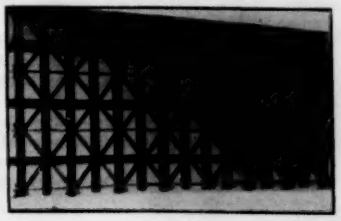
Kerrigan also announced that Harvey F. Neel, for the past 20 years with the Pennsylvania Department of Highways, where he advanced from foreman to bridge engineer, has been named Chief Engineer for the division. He will be located in Kerrigan's New York office. Neel is a graduate of the University of Alabama.

Greulich, long time consultant with U. S. Steel Corporation, pioneered development of the "I-Beam Lok" bridge floor system nationally in use since 1933 by highway builders and others, and established the steel "H-Pile" for bridge and other foundations.

To the public, Greulich is probably best known for inventing, developing and setting up in production (in 29 wartime plants) the famous pierced-steel plane landing mats used by the Air Force for landing planes on terrain otherwise unadaptable to such operation. Nearly 900 million square feet of mat were contracted for, enough for about 1,000 large runways. For this he received a Defense Department citation during World War II. During the Korean incident this same basic design was used for roadway surfacing on military treadway floating bridges.

Kerrigan's various expansions during postwar years include manufacture of grating in mild and stainless steels, aluminum and riveted steel for uses ranging from sidewalk doors to flooring for large industrial and power plants, and bridges; and a line of street and highway lighting standards, mast arms and brackets which have been used in installations in some 150 cities all over the nation.





South's Labor Pool Is Vital Resource

Semi-Idleness of Many Workers, However, Poses Knotty Problem

By Caldwell R. Walker
Editor, Business Trends

The South of today is the sole region of the United States that offers to new industry a substatnial pool of available personnel.

There are indeed some other scattered spots in the Nation where a certain amount of surplus labor is available.

But most of these areas vary from season to season and often from month to month in the number of persons that can be counted upon for this purpose.

In the South the situation is perpetual and varied little by reason of seasonal changes.

In the more highly industrialized states of the Region such as Maryland and Missouri, there are times during the year and doubtless during the boom peaks of cycles when labor conditions are tighter than usual, but even so there scarcely can be found a peacetime period when some idle labor is not to be found.

In the less highly industrialized states, such as Mississippi and Arkansas, surplus labor is a chronic condition and, except in time of war, there is never a time when new industry cannot enter such states with full assurance of having at hand all the labor force that is required.

This factor, when considered in connection with the South's strategic advantages with respect to materials and markets, is one that site-seeking enterprise cannot afford to overlook.

As pointed out in a previous article, however, it is markedly to the advantage of respective communities as well as to incoming industry that the labor force be analyzed and evaluated with as scrupulous attention as would be accorded the material supply or type of markets.

One particular fact stands out in special prominence. Of the total labor force of the South, about 20 per cent is of nonwhite racial composition. And of the surplus, or readily available supply, not less than 70 per cent falls into this classification.

There are certain industries in the South that have traditionally utilized colored labor almost exclusively. Among these are logging and sawmilling, fertilizer production and cement mills.

There are other Southern industries in which very little or no colored personnel at all is utilized. Textiles, Apparel and Food Manufacture rank among the most important of these latter.

By and large the industries that do utilize this type of personel are, up to the present, insufficient in the South to absorb and keep busy the entire available pool.

The time will come, if it has not already arrived, when Southern custom and Southern industry must answer the question: "To Utilize or Not Utilize."

The reason the question must be answered lies in the fact that other regions apparently are finding it profitable to draw on this pool, and the draft activated by these other regions is beginning to gather snowball type of increase.

This conclusion is readily evident from the following statistics: Labor force is roughly measurably by the population of which it is a component, and usually labor force will constitute about 40% of population.

In 1940 the 16 Blue Book states of the South had in their labor force something over 76% of all the colored workers in the United States. By 1950 this percentage had dwindled to somewhat under 67%.

Conversely, during the same period the remaining states of the Nation increased their prorata of colored workers from 24% to 33% of the National total.

In 1940 the proportion of labor force in the South represented by nonwhite races was 23%. By 1950 it was only 21%.

Looking again at the converse, the labor force of "Other States" in 1940 made up of nonwhite units was 4%. By 1950 it was 5%.

Some of these percentage comparisons do not appear to be particularly significant. When stated in other terms, however, their importance becomes completely evident.

For example, the difference between 4 and 5 per cent noted above means, in actual number of workers, that 1,358,000 workers who had their homes in the South in 1940 lived elsewhere in 1950.

That number is a sizable pool of labor, and had such a number migrated in entirety from the State of Tennessee, for instance, there would have been no labor force left at all in that state.

That, however, does not necessarily mean that the South sustained an economic loss by reason of such migration.

The pertinent significance is this: No matter where these workers found steady employment, whether in the South or elsewhere, the improvement of their status definitely raised the average per capita income status of all Southerners.

The question for Southern Industry to decide is whether opportunities are sufficient in the South to establish enough new facilities to furnish the kind of employment necessary to absorb this type of labor force.

If such opportunities exist, they by all means should be capitalized as swiftly as possible since current experience proves convincingly that labor pools emigrate when not utilized.

Heads of Chambers of Commerce can especially give careful study and analysis to this phase of their local resources for it might be that such analysis would result in complete change in plans so far as desired types of new industry are concerned.

There is also of course the other side of the picture. There is the possibility that justice to this section of the South's labor force and the wellbeing of the Region itself will dictate that further migration be encouraged to the end of better labor balance throughout the entire Nation.

In any event the questions involved require full revelation of the pertinent facts, and it is the purpose of this article to set forth some of these latter. The accompanying table shows the situation in somewhat more detail.

White & Nonwhite Population (000)

State	Population 1940	Population 1950	Population % Gain	White 1940	White 1950	White % Gain	Nonwhite 1940	Nonwhite 1950	Nonwhite % Gain
Me.	847	914	8	845	911	8	2	3	50
N. H.	492	533	9	491	532	8	1	1	0
Vt.	359	378	5	359	378	5	*	*	0
Mass.	4,317	4,691	9	4,258	4,611	8	59	80	36
R. I.	713	792	11	702	777	11	11	15	36
Conn.	1,709	2,007	17	1,675	1,953	17	34	54	59
N. E.	**8,437**	**9,315**	**10**	**8,330**	**9,162**	**10**	**107**	**153**	**43**
N. Y.	13,479	14,830	10	12,880	13,866	8	599	964	61
N. J.	4,160	4,835	16	3,931	4,511	15	229	324	41
Pa.	9,900	10,498	6	9,427	9,858	5	473	640	35
M. A.	**27,539**	**30,163**	**10**	**26,238**	**28,235**	**8**	**1,301**	**1,928**	**15**
Ohio	6,907	7,946	15	6,567	7,429	13	340	517	52
Ind.	3,428	3,934	15	3,305	3,757	14	123	177	44
Ill.	7,897	8,712	10	7,504	8,050	7	393	662	68
Mich.	5,256	6,372	21	5,040	5,920	17	216	452	109
Wisc.	3,138	3,435	10	3,113	3,394	9	25	41	64
E. N. C.	**26,626**	**30,399**	**14**	**25,529**	**28,550**	**12**	**1,097**	**1,849**	**69**
Minn.	2,792	2,982	7	2,769	2,952	7	23	30	30
Iowa	2,538	2,621	3	2,521	2,600	3	17	21	24
Mo.	3,785	3,955	5	3,539	3,654	3	246	301	22
N. D.	642	620	— 4	631	609	— 4	11	11	0
S. D.	643	653	2	619	629	2	24	24	0
Neb.	1,316	1,326	1	1,298	1,302	0	18	24	33
Kan.	1,801	1,905	6	1,734	1,829	5	67	76	13
W. N. C.	**13,517**	**14,062**	**4**	**13,111**	**13,575**	**4**	**406**	**487**	**20**
Del.	267	318	19	230	274	19	37	44	19
Md.	1,821	2,343	29	1,518	1,954	29	303	389	28
D. C.	663	802	21	474	518	9	189	284	50
Va.	2,678	3,319	24	2,016	2,582	28	662	737	11
W. Va.	1,902	2,006	5	1,784	1,892	6	118	114	— 3
N. C.	3,572	4,062	14	2,568	2,982	16	1,004	1,080	8
S. C.	1,900	2,117	11	1,084	1,294	19	816	823	1
Ga.	3,124	3,445	10	2,058	2,380	16	1,066	1,065	0
Fla.	1,897	2,771	46	1,382	2,167	57	515	604	17
S. A.	**17,824**	**21,183**	**19**	**13,114**	**16,043**	**22**	**4,710**	**5,140**	**9**
Ky.	2,846	2,945	4	2,631	2,742	4	215	203	— 5
Tenn.	2,916	3,292	13	2,407	2,762	15	509	530	4
Ala.	2,833	3,062	8	1,849	2,079	12	984	983	0
Miss.	2,184	2,179	0	1,106	1,190	8	1,078	989	— 8
E. S. C.	**10,779**	**11,478**	**6**	**7,993**	**8,773**	**10**	**2,786**	**2,705**	**— 3**
Ark.	1,949	1,910	— 2	1,466	1,482	1	483	428	—11
La.	2,364	2,684	14	1,512	1,798	19	852	886	4
Okla.	2,336	2,233	— 4	2,104	2,032	— 3	232	201	—13
Tex.	6,415	7,711	20	5,488	6,724	23	927	987	6
W. S. C.	**13,064**	**14,538**	**11**	**10,570**	**12,036**	**14**	**2,494**	**2,502**	**0**
Mont.	559	591	6	540	572	6	19	19	0
Ida.	525	589	12	519	582	12	6	7	17
Wyo.	251	291	16	247	285	15	4	6	50
Colo.	1,123	1,325	18	1,107	1,297	17	16	28	75
N. M.	532	681	28	492	630	28	40	51	28
Ariz.	499	750	50	427	655	53	72	95	32
Utah	550	689	25	543	677	25	7	12	71
Nev.	110	160	54	104	150	44	6	10	67
Moun.	**4,149**	**5,076**	**22**	**3,979**	**4,848**	**22**	**170**	**228**	**34**
Ore.	1,090	1,521	40	1,076	1,497	39	14	24	71
Wash.	1,736	2,379	37	1,698	2,317	36	38	62	63
Calif.	6,907	10,586	53	6,597	9,919	50	310	667	115
Pac.	**9,733**	**14,486**	**49**	**9,371**	**13,733**	**46**	**362**	**753**	**108**
U. S.	**131,668**	**150,700**	**14**	**118,235**	**134,955**	**14**	**13,433**	**15,745**	**17**
South	**45,185**	**50,836**	**13**	**34,986**	**40,232**	**15**	**10,199**	**10,604**	**4**
Other	**86,483**	**99,864**	**15**	**83,249**	**94,723**	**14**	**3,234**	**5,141**	**59**

Supplemental Unemployment Benefit Plans May Be Blocked by State Opposition in South

By Sidney Fish
Industrial Analyst

The opening of a new area of bargaining by unions on the question of supplemental unemployment compensation to be provided by employers finds Southern states in a relatively strong position. Some States may find it desirable to block this demand. They can do this by refusing to permit integration of the private supplemental payments, which are to be arranged through collective bargaining, with the State unemployment compensation plans, which are established by law.

In most Southern states, the law currently bars payments from the State unemployment compensation funds, where a laid-off worker is continuing to receive any form of compensation from his employer. This ban on supplemental payments will apply to any new type of bargaining agreements, like those entered into by the Ford Motor Company and General Motors. These call for payments by employers to laid off workers running as high as $25 a week for as much as 26 weeks, over and above State unemployment benefits. The stated objective of the Ford-type contract is to provide total unemployment compensation, from both sources, running as high as 65 per cent of what the workers' take-home pay was before the lay-off.

This new trend in bargaining threatens to spread from the auto industry to other mass production lines. Because the auto industry operates on a nation-wide basis, with assembly and parts plants in virtually every state, the agreement to pay supplemental compensation will have profound effect on employers' costs.

The possibility that many states might not agree to approve integration of State unemployment benefit plans with private agreements established through collective bargaining was foreseen in the Ford contract. This states that the plan becomes null and void by June 1957 unless a sufficient number of states ratify integration of both types of benefits. To permit payment of State benefits along with the company's new benefit program most states will find it necessary to pass legislation legalizing such a policy.

Even if the Ford plan as a whole becomes operative in Michigan, Ohio and other northern states, it may not be legal in many states, particularly those in the South. Resistance to the plan is certain to be strong among legislatures in States which are trying hard to recruit new industries, or which do not wish to have additional burdens placed on infant industries within their borders.

The Ford plan apparently recognized the likelihood that many states would prefer to allow unemployment to be handled within the framework of the existing State unemployment plan, rather than to superimpose new generous payments on top of the State benefits. To permit over-generous payments to be made to laid off workers would have disruptive effects in many communities. The incentive to work and to accept suitable employment will be lost, if laid-off workers receive unemployment compensation that is almost equal to what they would get for working. It must be remembered that there is no Federal income tax on State unemployment compensation. This means that the worker who receives such benefits often gets 50 per cent or more of what he would receive in take-home pay while working. This is particularly true of the unmarried, low seniority worker, who is often the first to be laid off. Such a worker often receives, in State unemployment compensation, 60 per cent of his normal take-home pay while working, because his income tax when working is relatively high.

The Ford Company, seeing the possibility that some States would bar integration of the company's plan with State unemployment compensation, proposed an alternative arrangement in States which refuse to legalize full coordination. The Ford plan suggests that workers, in such states, will draw State benefits for two consecutive weeks, then will receive in the third week, triple benefits under the Ford plan. At the end of the third week, the worker would go back on State unemployment compensation for two weeks, then would accept the Ford triple benefit payment for the sixth week. This alternating program would continue until the worker had exhausted his credits under the Ford plan.

Whether such a scheme would be held legal remains to be seen. It might be regarded by state officials as an evasion of the ban on integration. Having ruled that state benefits could not be paid to any worker who was receiving benefits under a private program, the state might feel that the alternating payment plan represented a continuation of the employment relationship. They might rule that State payments should be stopped to workers covered by Ford-type plans or that the private benefits be deducted from the State unemployment benefits. Only time can tell whether the Ford-type plan will have to be extensively revised to make it conform to State policy. Some industrial relations experts feel that the States will resist the Ford plan, and that ultimately liberalized State benefits will completely replace most of the private unemployment compensation programs which are established.

Only in a few Northern states—New York, Pennsylvania, Massachusetts and New Jersey—is it likely that payments

of State benefits along with private supplemental benefits, will be approved by State authorities without legislation. In seventeen other states, any employer's supplementary payment would have to be deducted from the State benefit to be legal. In ten states, legislative action will probably legalize integration. In nearly a dozen states, administrative decisions will be needed before it is known whether legislative action is necessary to legalize integration.

The situation in Southern states can roughly be summarized as shown in table adjacent:

	Present Weekly Maximum Benefit	Status of Integration of State and Private Plans
Alabama	$22	Private payment must be deducted from State benefit.
Arkansas	$26	Ruling needed to determine whether private benefits are "wages." If held wages, integration barred.
Florida	$26	Private payment must be deducted from State benefit.
Georgia	$26	Any private payment in excess of $5 would be deductible.
Kentucky	$28	Supplementation of State benefit may be allowed, but no certainty as yet.
Louisiana	$25	Legislative amendment of State plan needed to permit integration.
Maryland	$30	If employers' supplement is held to be wages, amount is deductible from State benefit.
Mississippi	$30	Amendments by legislature needed to permit integration.
North Carolina	$30	Decision on whether integration is permissible will depend on decision as to whether individual is regarded as still "employed."
Oklahoma	$28	Supplemental payment in excess of $7 must be deducted from State benefit.
South Carolina	$26	Administrative ruling needed to determine state policy.
Tennessee	$30	Supplemental payment in excess of $5 must be deducted from State benefit.
Texas	$28	Decision will depend on whether supplemental benefit is regarded as "wages."
Virginia	$24	Supplemental payment now deductible from State benefit.

The action of the Ford Motor Company in agreeing to pay supplementary unemployment compensation to laid off workers, over and above State unemployment compensation, introduces several important new factors into the labor relations situation.

The Ford agreement to pay 5 cents per man-hour worked into a special trust fund for supplemental unemployment compensation does not mean that the guaranteed annual wage has been recognized as a feasible demand. But it is a step in that direction. Many other unions will want to bargain on such supplemental payments in the future. On the expiration of many current contracts there will be demands by union leaders for an increase in payments into the fund, as well as in the benefits paid out to unemployed workers.

This trend in the direction of a new area of bargaining, as exemplified by the victory of the Ford union, means that in addition to higher wages and increased pension and social insurance benefits, unions will be asking more and more protection for workers against loss of income caused by unemployment.

This trend is a threat to any company which cannot provide stabilized employment; and there are very few that can look ahead with assurance and say that they are sure that they can avoid seasonal and cyclical unemployment—as well as the misfortunes that frequently come to individual companies even in years when the economy as a whole is thriving.

Despite this apparent trend in the auto industry towards supplemental unemployment payments, the average small employer should not feel completely helpless. There are things that he can do to avoid the costs and the dangers of sharply increased unemployment benefit payments. And there are things that the individual states can do to protect business establishments within their borders.

Here are some of the things that must be done to keep private industry strong in the face of the threat of rising costs for unemployment benefits:

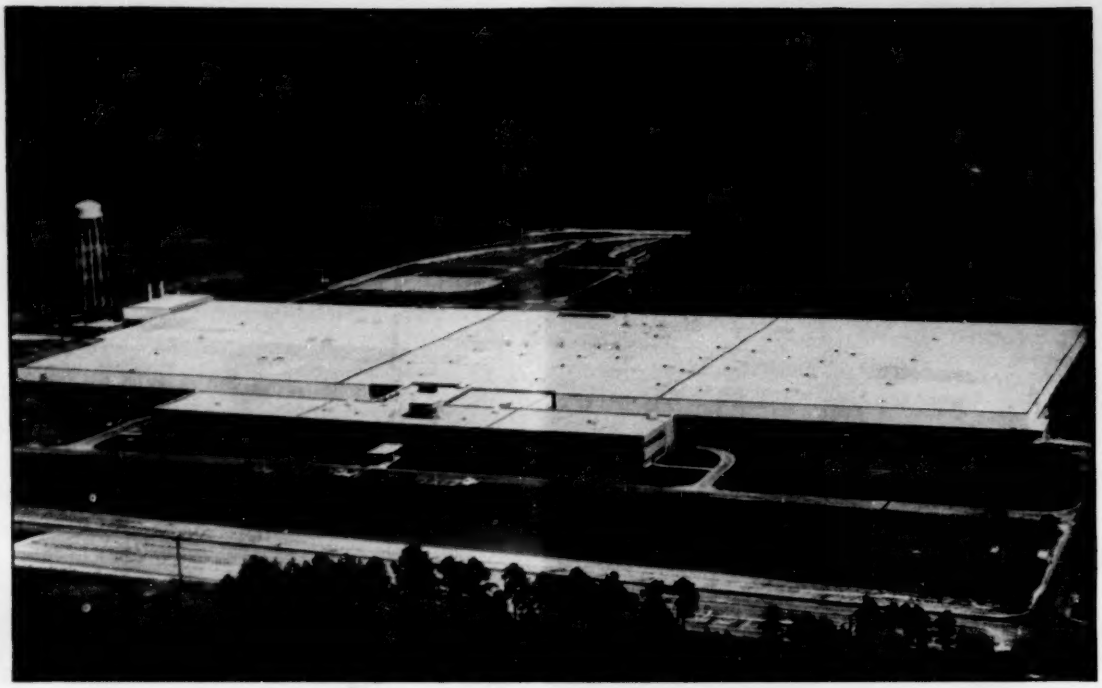
1. The average employer must insist on bargaining on the basis of the competitive situation which he faces. A union victory in gaining a supplemental compensation fund is not going to do the workers any good if the company has to close down or reduce employment permanently. The employer therefore must resist with determination any "pattern" which emerges from the auto industry. The granting of company-financed pensions to workers by auto companies six years ago did not establish a uniform pattern for other industries; many companies still have not adopted pension plans or have put into effect low cost programs set up on a contributory basis. It is likely that Ford's supplemental unemployment compensation plan will be even less of a rigid pattern than will be followed in other industries. Employers will bargain with their unions and in many cases will successfully offer alternatives—thrift plans, loans plans, limited severance pay plans, liberalized pensions, or wage increases, etc.

2. To help it to resist the union demand for unemployment compensation, the employer should do what he can to stabilize employment. He can try to eliminate seasonal fluctuations in production, by diversifying his line and by better sales planning. But it should not be assumed that such efforts will prevent the union from asking for the establishment of a fund for laid off workers. A study of union policies shows that the demand for the guaranteed annual wage and for supplemental compensation, is made first on those very industries which are successful in stabilizing production and jobs. Where a company is not able to regularize its sales, the union knows that the cost of any annual wage plan would come too high to be feasible. Eventually the union will ask for supplemental unemployment compensation plans even where companies have had a record of sharp fluctuations in production. But for the next year or two they will hesitate to force such plans on marginal-type producers.

Such supplemental payments will prove costly to the average employer, and to limit the costs, he should try to do a better planning job. In this way, he may gradually be able to make progress towards reducing overtime payments at premium rates in the busy season, and also towards cutting layoffs in the slack season. Stabilized production generally means a more efficient, lower cost operation.

3. A stronger organization of employers to meet the union demand is needed. The Ford capitulation was made possible by the fact that there is no cooperation among the leading auto companies in the field of collective bargaining. The union is therefore in a position to strike the individual companies one at a time. A united front of employers probably would have blocked the demand of the United Auto Workers—CIO this year. But a united front is not feasible in the auto industry yet, because competition for leadership in sales is extremely keen.

4. Employers must enlist the help of their state governments to fight the trend towards the annual wage plan. The individual States are in a position to block the union drive, by barring integration of State benefits and private supplementation. Thus, the Ford plan can become effective in a year only if states in which two-thirds of Ford employees work permit the Ford plan to be integrated with State benefits. This means that unless enough States allow Ford to pay supplemental compensation to laid off workers who are at the same time receiving State benefits, the Ford plan will be scrapped. Even if the Ford plan becomes effective in June 1957—it is likely that many individual States will continue to refuse to pay unemployment benefits to workers who are receiving such benefits from a private fund like the one to be established by Ford.



Westinghouse's Raleigh, N. C., plant, for the manufacture of watthour meters.

Factors Contributing to Westinghouse's Selection of North Carolina Site

by E. L. Morrison

When Westinghouse Electric Corporation officials engaged a firm of factory-locating consultants to investigate and survey plant sites for a new meter plant, they were not restricted to any one area. The entire United States was to be considered.

The fact that Raleigh, N. C. was the final choice because of a whole complex of factors—none of which was critical in itself—has been a source of understandable pride with the local Chamber of Commerce. Westinghouse's Raleigh Plant has been turning out watthour meters since January, 1954. In mid-1955 it was employing 700 persons, with cadres of skilled people training in preparation for an expected total of 2,500 in 1957, about 60 per cent of them women.

One unquestionable asset in Raleigh's favor, in addition to such other factors as climate and transportation facilities, is that it could provide Westinghouse with a good-sized labor force. In a preliminary survey, company officials placed an eighth-of-a-page ad in the Raleigh News & Observer with the following legend:

"Are You Interested in Joining a Nationally Known Manufacturing Concern in the Event it Builds a Plant in Raleigh?"

As an indication of interest, plant officials say, there were about 10,000 replies to that advertisement.

Best of all is the fortunate circumstance that, in coming to Raleigh, Westinghouse has not entered into competition with any other employer for a given segment of available labor. The firm has been able to employ many persons who made up part of Wake County's labor

surplus stemming from the area's growing pains in the post-World War II era. Raleigh's own population now comes to some 70,000.

According to Raleigh's Chamber of Commerce and based on information developed by the American Industrial Development Council, the Westinghouse Raleigh payroll will support 12,160 people, develop 144 new stores, increase business in banks, hotels, restaurants, real estate, buses and taxis, office buildings, insurance, fuels, utilities, and beyond all that, will bring each year an increase of $12,920,000 in retail sales and services.

The Westinghouse plant-locators were able to take advantage of the fact that Raleigh, the state's capital since colonial days, is beginning to recede somewhat from its long-time antipathy toward having industry nearby. The labor supply situation had developed by the early 1950's to the extent, however, that the city fathers were glad to welcome a plant, some 2 miles from the city, and with none of the unsightliness they associate with "heavy industry." Certainly, there is nothing in the Westinghouse set-up to alter in the slightest degree Raleigh's predominant function as a center of government and culture.

At the same time, Westinghouse officials had to face up to a particularly sensitive local sewage disposal problem and they did so with great success. The City of Raleigh has had to float a bond issue for the construction of a sewage disposal plant, this after repeated complaints from the City of Smithfield, N. C. that Raleigh sewage was polluting the Neuse River, which serves as Smithfield's primary water source.

Any newcomer industry to Raleigh, therefore, is given a pretty strict going-over by city engineers on the subject of waste disposal. The Westinghouse people carefully planned their waste disposal procedure from the moment of groundbreaking, Nov. 18, 1952, and instructed the general contracting firm, Virginia Engineering Company, Inc., Newport News, Va., to build a separate building for that purpose.

The resulting neutralization plant for plating-room acids and alkalis plus industrial cyanide has done yeoman service in removing objectionable materials from Westinghouse waste products before they enter Raleigh's sewage disposal system.

The wastes are conveyed to the neutralization plant by two separate lines of terra cotta tile lined with an acid resistant mastic by General Waterproofing Co. The acid-alkali line is 8 in. and the cyanide 6 in. in diameter. These lead into the settling basins, one primary and three intermediate, where most of the impurities are diluted, and to a chlorine pit for further treatment to insure a PH meter reading of at least plus-8 acidity.

In the primary settling basin the waste end-product is agitated with giant paddles and the sludge separated from the acceptable waste, which is then fed into the city's sewage system. The neutralization plant is fitted with instruments bearing Foxboro controls.

Another point of departure for a healthy public relations climate is the Raleigh plant's cafeteria, which seats 400 persons, and which Westinghouse handles in a novel but highly successful manner. Instead of retaining a national catering organization to handle in-plant dining facilities, Westinghouse officials awarded a $1-a-year contract to the well-known Raleigh restaurateur, W. W. Balentine, operator of Balentine's Restaurant on Raleigh's principal thoroughfare.

Westinghouse undertook the complete job of fitting the cafeteria with kitchen and dining equipment, including new Westinghouse-developed incandescent lighting. Mr. Balentine was then asked to put his restaurant experience to work, with such excellent results that 90 per cent of the plant's employes eat there regularly. Owing to the twin circumstances of an assured demand plus advantages of buying in quantity, Mr. Balentine has consistently saved money for Westinghouse employes.

The company retains full supervisory control under this contract arrangement. There is no delay, for instance, in handling complaints on such matters as prices, because the prime contractor is always at hand. He is also responsible for providing meals at night for second-shift employes.

Plant officials are satisfied that their novel contract is a sound public relations device. It has the advantage, they feel, of associating them with a popular and highly respected local restaurateur, of taking the initiative in boosting still another Raleigh payroll.

The cafeteria's menu holders have their public relations value, too, and they carry each day a colored card entitled "The Meter Mail." This carries in-plant news items, mimeographed in duplicate on both sides of the card, with an occasional humorous note by way of leavening.

The Raleigh plant is a branch of Westinghouse's Meter Division and manufactures watthour meters. This meter, which measures the amount of electric power used, is known as the "Cash Register of the Electrical Industry."

This meter's gears are cut as accurately as those of the finest watch and is gold-plated to prevent corrosion. Jewels of sapphire are used in the meter to reduce friction and assure long life, enabling the meter to retain its high accuracy year after year in all kinds of locations, indoors and out. The meter must perform with unfailing reliability although exposed to all ranges of temperatures, climate and weather conditions.

The Westinghouse single-phase watthour meter, such as used in the home, has more than 250 separate parts. In manufacturing a meter, Raleigh personnel perform more than 325 labor operations. And because the slightest bit of dust or foreign matter will throw off its delicate calibration, the meter moves through the Raleigh straight-line assembly plant on some 1½ miles of protected conveyor.

Because Westinghouse is the largest and newest plant in Wake County it plays host to every conceivable group of visitors. The Raleigh Kiwanis Club once held

View of the molding room showing the cage-like structure that protects the conveyor system.

its weekly meeting in the plant, and members of the Central Carolina Personnel Association were the company's guests at a supper there.

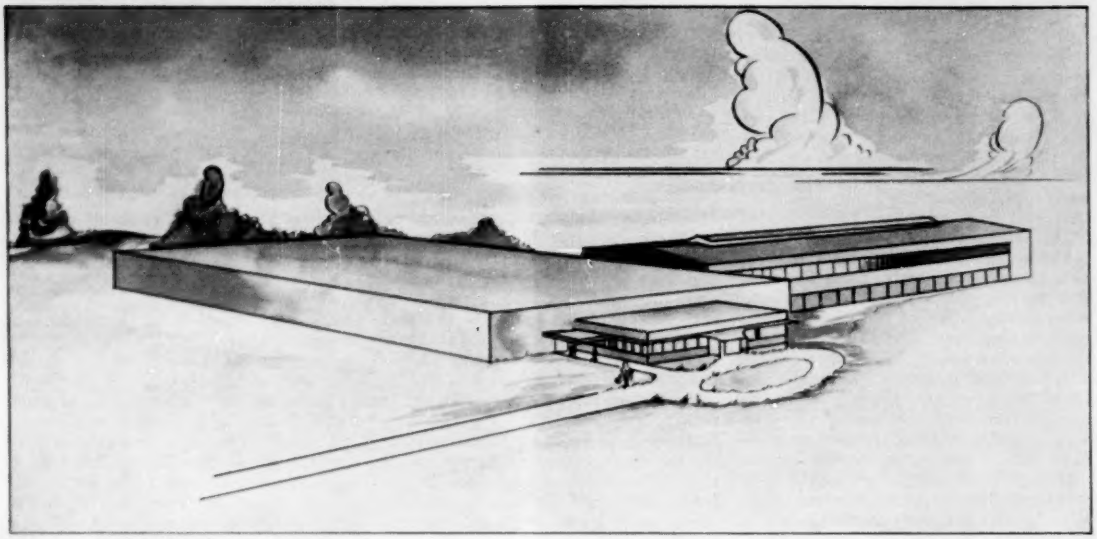
Dozens of grade school and high school classes make the trip out to the big plant, which is 1,020 feet long and 420 feet deep, and the two-story office building 460 feet long and 80 feet deep. Some 300 Raleigh public school teachers have made the tour, as have the members of various engineering societies and students in the University of North Carolina's School of Business Administration.

A Swiss made Petermann Automatic Screw Machine.

Plant Manager James A. Babcock has made many talks on the new plant before civic and other groups, as has Jules A. Medwin, the plant's training and safety supervisor. In addition, all plant supervisors—and there are approximately 65 in that category—have been thoroughly briefed on everything about the plant so they may discuss intelligently with their neighbors everything from the career of Founder George Westinghouse to the Raleigh group's pride and joy, one of the finest Tool Rooms in the South.

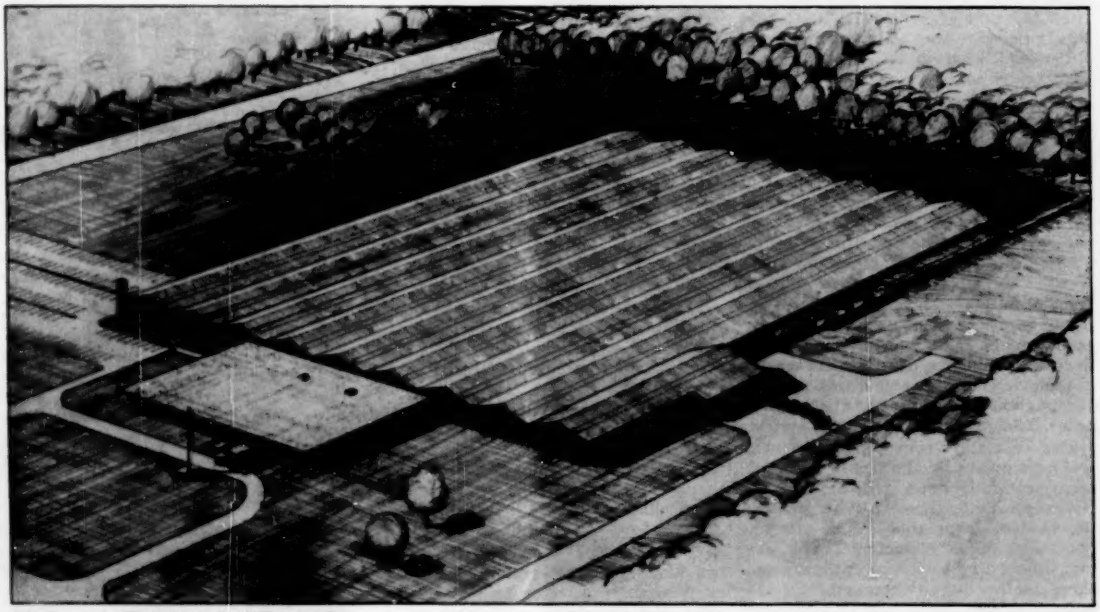
The "feeder section" which forms an important part of the plant's straight line assembly operation.

INDUSTRIAL



IN KENTUCKY

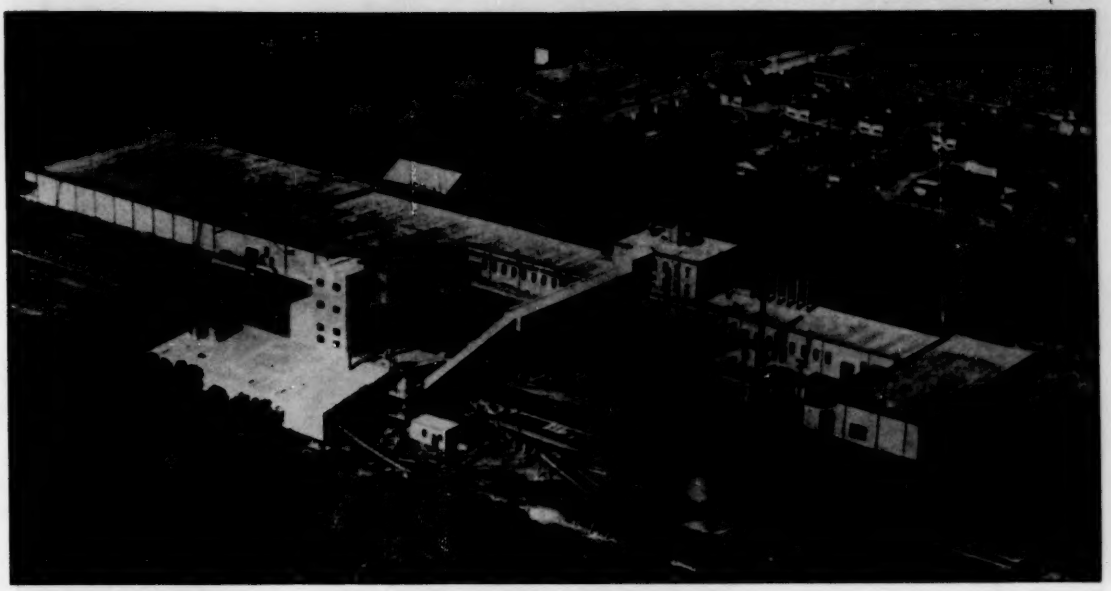
Ground has been broken on this modern 104,000 square foot parts plant of the Rockwell Manufacturing Company in Russellville. Cost of the new plant will be in excess of $1,000,000, exclusive of production equipment. Clark Construction Co., Owensboro, Ky., is general contractor.



IN ARKANSAS

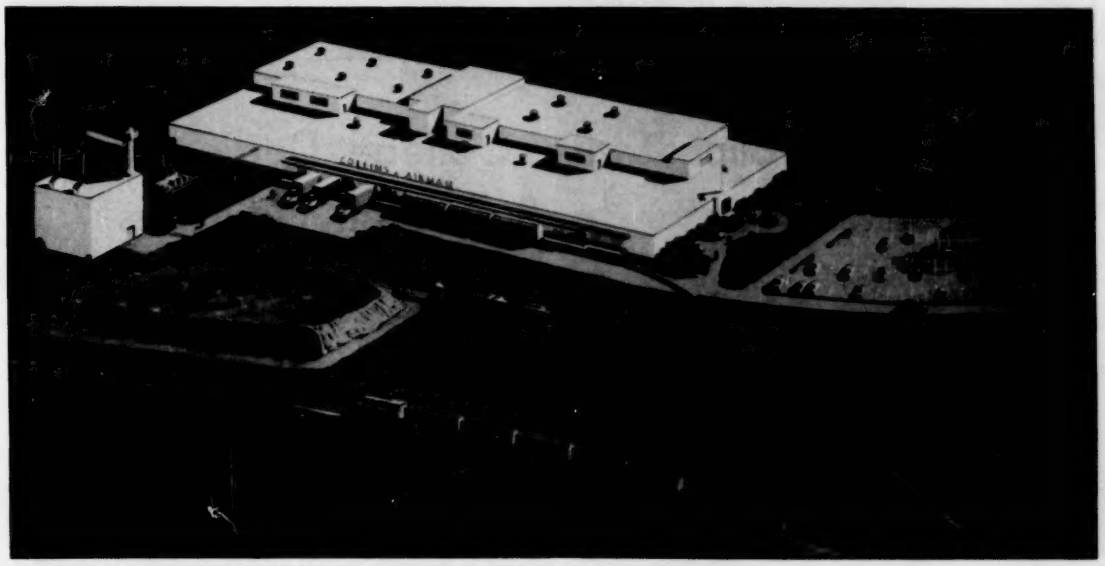
Architect's sketch of the South's first bicycle manufacturing plant being built for AMF Cycle Co. (affiliate of American Machine & Foundry Co.) at the new Little Rock Industrial District. The $1,250,000 building is being constructed by Dickmann-Pickens-Bond Construction Co., Little Rock. Architects are Brueggemann & Wanger, Little Rock, and Howard B. Cain, Cleveland, Ohio.

EXPANSION



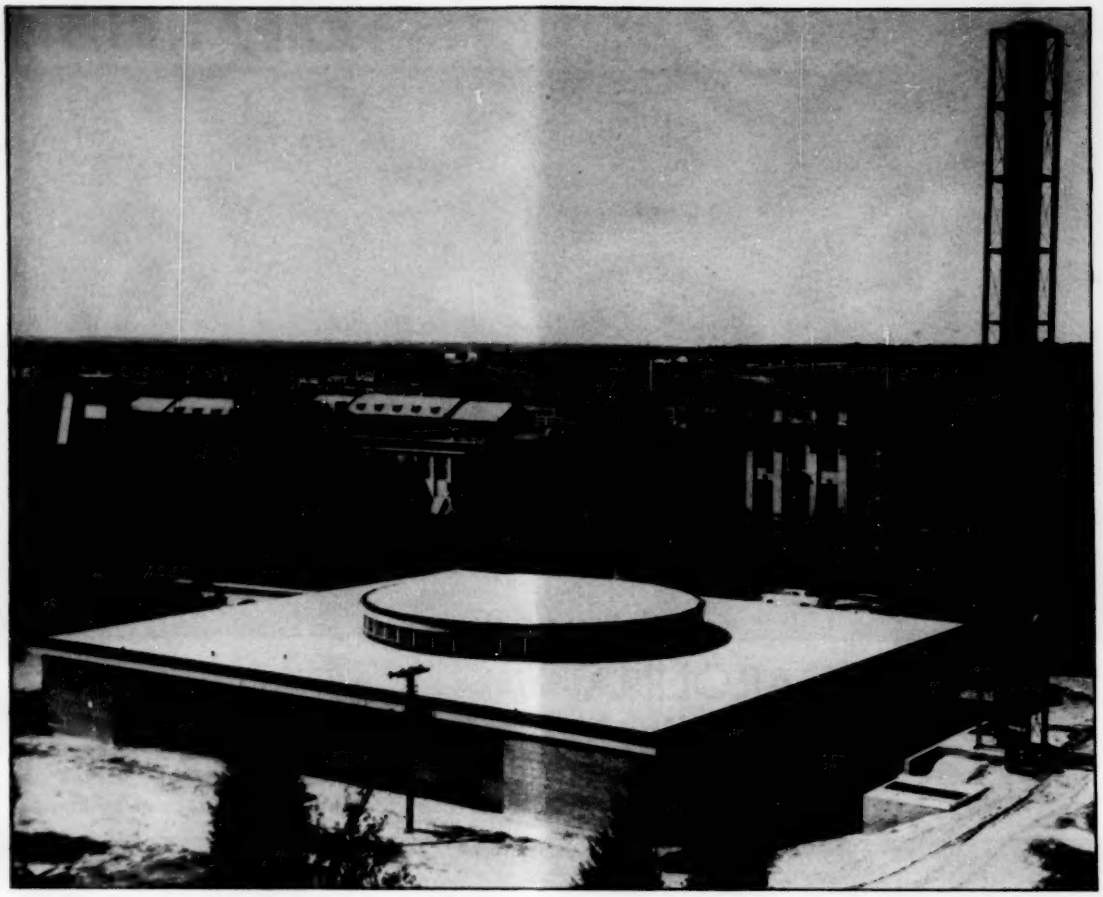
IN SOUTH CAROLINA

The new $2,500,000 roofing and granule plant of Bird & Son, Inc., in Charleston. Located on about 60 acres of land at Stark Industrial Park, the Charleston operation takes its place beside fifteen other Bird plants in nine different states. (See article p. 36 March 1955 Manufacturers Record.)



IN NORTH CAROLINA

Artist's conception of the new $2,500,000 finishing plant of the Collins & Aikman Corporation near Albemarle. The new plant will replace the firm's Philadelphia plant. Lockwood Greene Engineers of Boston, New York and Spartanburg are Architect-Engineers; and C. M. Guest & Sons of Anderson, S. C., and Greensboro, N. C. are the builders.



North Carolina State College Dedicates Nuclear Reactor to Burlington Industries

THE people of North Carolina recently honored their largest corporation — the Burlington Industries and its dynamic president, J. Spencer Love—by dedicating their unique State College nuclear reactor building as the Burlington Nuclear Laboratories.

At a major luncheon and dedicatory exercises attended by the Governor, the University Board of Trustees, state and national dignitaries, the Burlington Nuclear Laboratories were described as "a gift of the men and women who own Burlington Industries, Inc., their directors and their president, James Spencer Love."

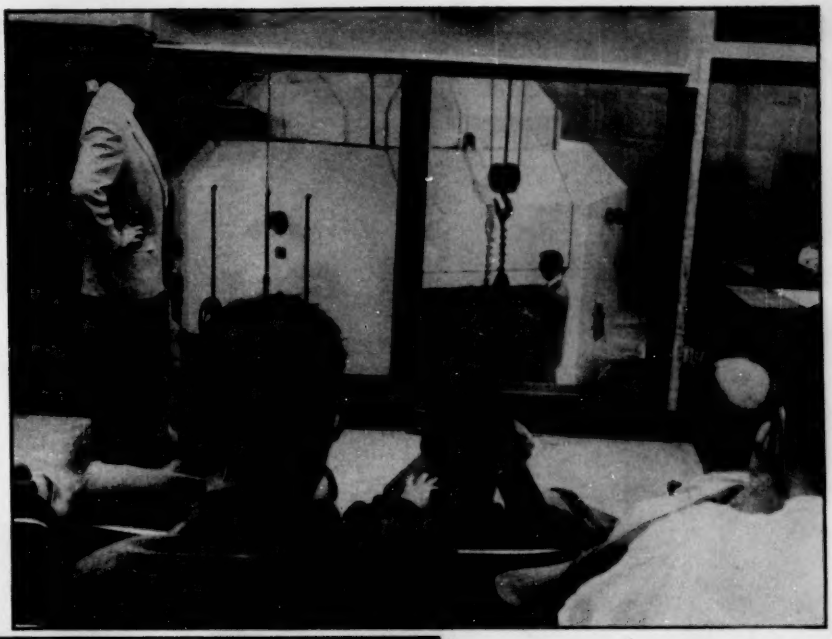
The Burlington Industries Foundation invested the initial $200,000 to construct the unique laboratory building that houses the world's first college-owned, openly-operated nuclear reactor. In operation less than two years, the Raleigh Research Reactor — built through the foresight of the Burlington Industries and the N. C. General Assembly at a total cost of $630,000—has attracted over 8,000 visitors so far. These have included special delegations from 14 foreign nations and 20 American universities, seeking to learn how to develop a research reactor.

Describing the dedication as "an historic one for your institution and for the whole country," Dr. Willard F. Libby—one of the five members of the nation's Atomic Energy Commission, who delivered the major address—called the reactor "a valuable teaching tool for the essential education of students in the new field of nuclear science and engineering —which ends Government monopoly in a very important field in being financed by private sources."

Appearing on the historic program, in addition to Dr. Libby, were: Mr. Love; Governor Hodges; President Gray; Chancellor Bostian; Congressman Carl Durham, vice-chairman of the Joint Congressional Committee on Atomic Energy; and Dr. E. McNeill Poteat, pastor of Pullen Baptist Church.

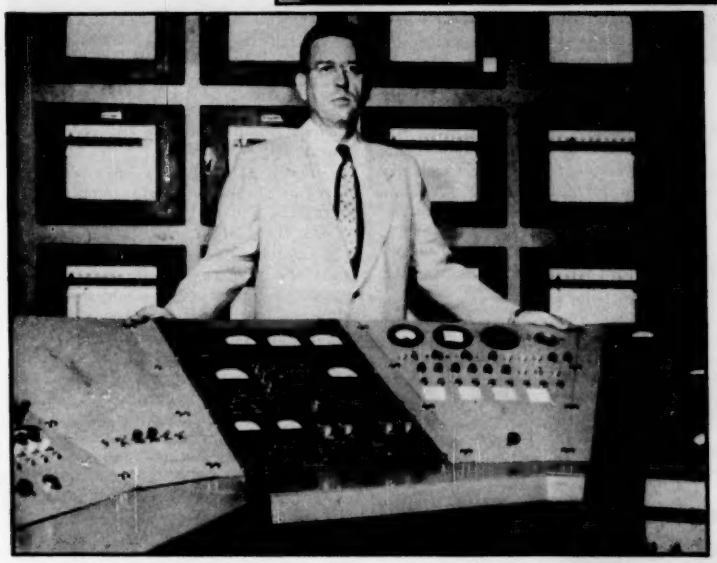
The State College reactor (once called "the first temple of the atom," because of its public nature, by Howard Blakeslee, late science editor of the Associated Press) is being operated for three purposes: (1) To provide a teaching tool through which nuclear engineers can be trained in programs leading to B.S., M.S., and Ph.D. degrees in nuclear engineering; (2) To provide a research tool through which radiation can be generated for experiments in all areas of physics, chemistry, biology, medicine, agriculture, engineering, and related fields; (3) To explore ways and means of removing heat from larger reactors for the production of power.

The heart or core of the reactor has five parts: (1) A fuel container, which is a 4-gallon stainless steel cylinder of greenish-



From an observation room seating 55 people, visitors can witness tests never before open to the general public.

Below: Dr. Clifford K. Beck stands at the control panel of his reactor control room.



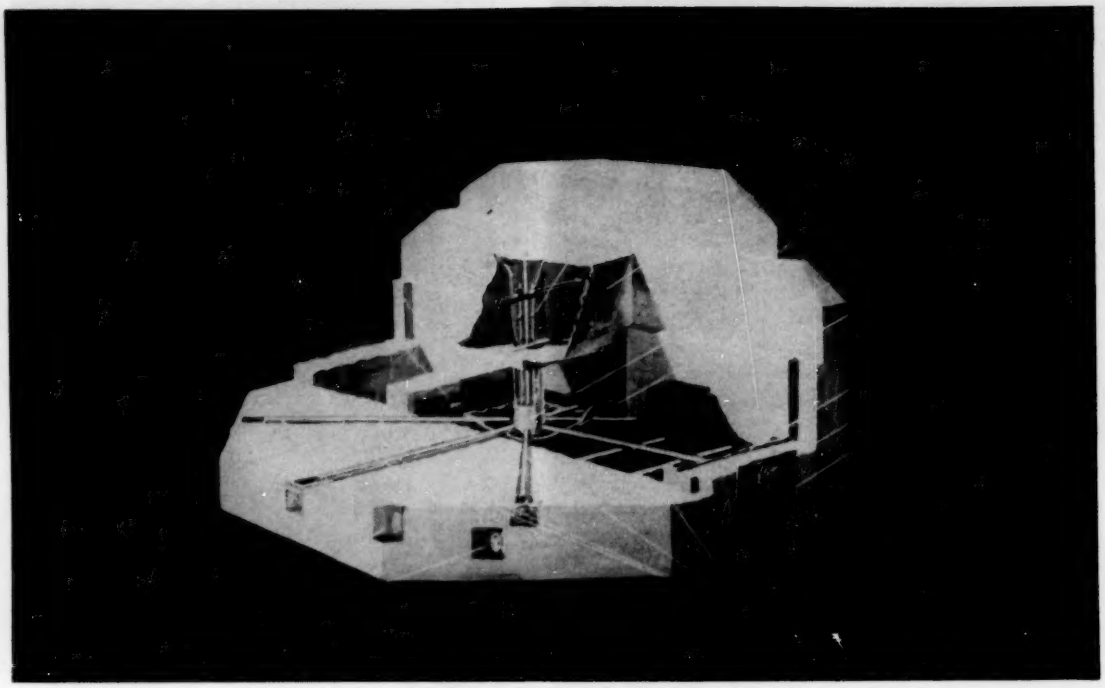
yellow liquid, 11 inches high and 11 inches around, holding nearly 800 grams of uranium bubbling like ginger ale that will last 300 years; (2) A small metal pellet, for discharging a steady stream of neutrons into the fuel to react with the uranium; (3) Control rods, which are two boron rods, ¾ inch thick and 12 inches long, used to start and stop the reactor; (4) A cooling system, which sends four gallons a minute of cold water flowing through cooling coils immersed into the fuel; (5) A gas disposal system, necessary to recombine and condense radioactive waste gases formed in the fuel cylinder.

Nuclear fuel gives off three primary products when it burns or fissions: heat, radiation, and fission products which are the fragments of the split atoms or the ashes of the fuel—the heat can be used to power objects, radiation can be used to experiment on various materials, and the ashes are a problem.

This core, this small can of uranium fuel and its connecting controls, is enclosed by a massive 250-ton shield—a huge octagonal structure, 17 feet across and 12½ feet high, weighing over a half million pounds, including over 200 tons of concrete, 10 tons of graphite, and 13 tons of lead—to absorb the intense radiation given off by the nuclear fuel.

The Reactor Building has five basic features: (1) The reactor room, an octagonal pit, 8 feet below ground level, 60 feet in diameter, 35 feet high, with dome roof, motor driven crane, beam traps and storage tubes in walls, floor trenches with special covers that can be raised into working tables for use in experiments; (2) A control room, alive with meters and dials, with a master console for recording experiments, controlling the reactor, and communicating with other areas of the building; (3) An observation room,

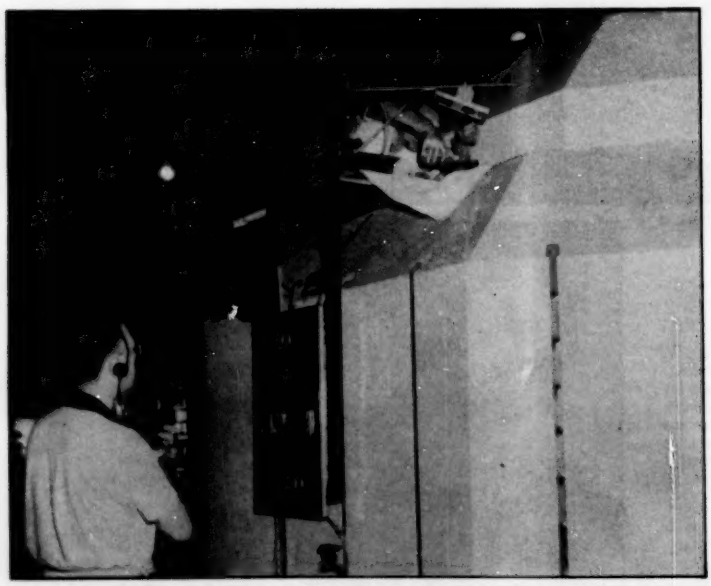
Two armed couriers deliver nuclear fuel from Oak Ridge



which is a semi-circular, four-tier room seating 55 peoples, with windows that hold water to provide an 8-inch shielding when needed; (4) Special ventilation and safety system, which filters the air 3 times before it goes up the exhaust stack and operates monitors that warn against discharge of unsafe radiation; (5) Offices and laboratories for the reactor staff and for research and teaching.

The reactor is used in three ways to help train nuclear engineering students:

1—A sequence of reactor experiments has been developed to serve advanced students like a formal laboratory course. These experiments accompany or follow a course on Elementary Reactor Theory, devoting much attention to the fundamental characteristics of reactors and uses.



As the first uranium was poured in the Reactor loading tube, Dr. Beck maintained close contact with the control room.

2—Most of the graduate students in Nuclear Engineering use the reactor on their thesis research.

3—Many self-help students are employed as part-time assistants on reactor operations and on research projects involving the reactor.

The reactor has enabled the college to grant the first two Ph.D. degrees ever awarded in nuclear engineering and to develop one of the nation's first textbooks on ways and means of using atomic energy for peacetime purposes. In its first four years, the college's pioneering nuclear engineering program has granted 73 B.S., 61 M.S. and three Ph.D. degrees. During this year, the program had 170 students enrolled in undergraduate and graduate work.

Recent graduates are doing nuclear work for the Air Force. Some are working on nuclear-powered submarines for Westinghouse and General Electric, others on nuclear-powered aircraft projects for Consolidated Vultee, Pratt Whitney, and General Electric. A few are serving the new Atomic Power Division of the Newport News Shipbuilding Company. Still others are nuclear specialists on reactor projects at AEC national laboratories. All are working on major reactor developments over the nation.

And they learn that although such research sometimes deals in highly technical, seemingly obscure theory, the results might be as important as the development of a new textile fiber or a new ship propulsion unit. For scientists now predict a significant part of our electric power will be run by atomic energy 15 years hence, and virtually every ship will be propelled by atomic energy in the near future.

Industrial Paint Manufacturing At Oklahoma Paint Firm

DID you ever stop to wonder how the tremendous volumes of paint and varnish we use each year is made? Where do we find all the ingredients to make the paints to keep our houses clean and bright, our business buildings up-to-date, and all our material wealth in any form looking its best and protected from weathering elements?

Paints and enamels have been used for decorative and protective purposes from time immemorial. Today they are still made from many of the same ingredients used centuries, even eons ago, but also from several new man-made chemical synthetics recently discovered.

Many of the original pure color pigments are still extracted from the earth itself, such as sienna yellows, umbers, vermillion, and ultramarine; and such metals and minerals as lead, zinc, lithopone, titanium and chrome still form the great body of basic pigments in paints. As a carrying and covering vehicle, these pigments are still, as of old, dissolved in various oils and viscous fluids made from rosins and resins. These latter are mostly solidified juices of various trees found throughout the world, many of which have been used during past ages as shellac, lacquer and varnish.

The rosins and resins, and a particularly valuable fossilized gum resin found in the oceans, are first dissolved by heating them with oils such as chinawood oil from the tung nut tree, linseed oil from flax, soya oil from soy beans, or turpentine from coniferous trees.

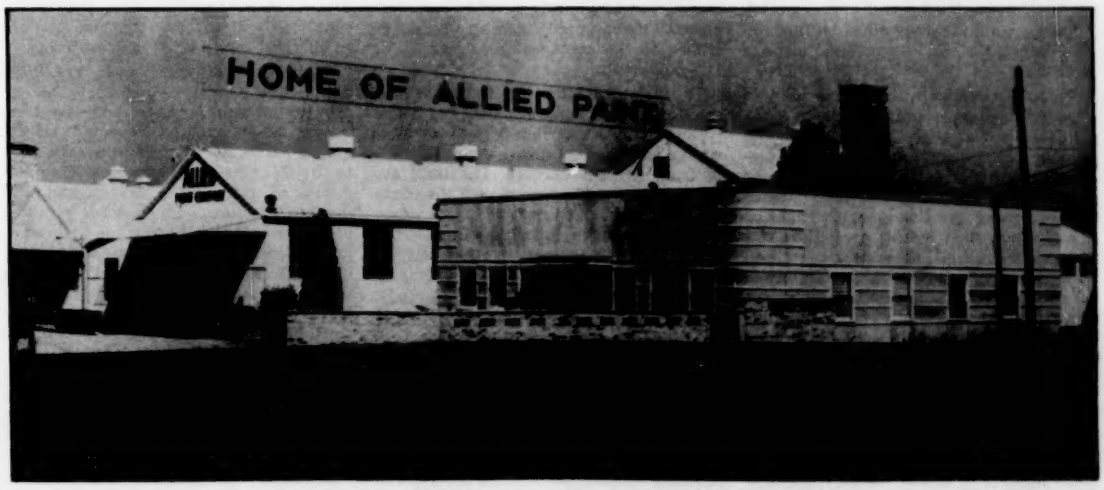
Formerly most all of the color pigments, oils, rosins and resins were imported from Europe, Asia, and the tropical Pacific Islands. However, during World Wars I and II, many of these substances were unavailable to us as imports, and American ingenuity came to the rescue by finding domestic sources and substitutes—some of which turned out to be even superior to the old ingredients. For instance, the synthetic resin Bakelite is an excellent ingredient to give toughness and durability to paints and varnishes, and ranks with that very important chinawood oil to give weather-proof and wear-proof qualities to the better types of paints. Also non-fading shades of maroons and blues particularly desired for automobile enamels have been discovered in chemical synthetics in the past few years.

How well the paint industry has succeeded in taking advantage of scientific advances is exemplified by one of the newest and most aggressive paint companies, the Allied Paint Manufacturing Company of Tulsa, Oklahoma. This small company, organized in 1939 by three ambitious young paint salesmen located in Tulsa, set out to make a paint especially resistant to the intense sunlight and heat, the zero cold and wet, of their own particular southwestern region whose climatic atmospheres were also plagued with acid and alkaline gases found in the recently discovered oil and gas fields. Apparently none of the best paint made theretofore had held up to the anticipations of the oil and gas industry management. The Allied Paint partners determined to see what they could do about remedying the matter.

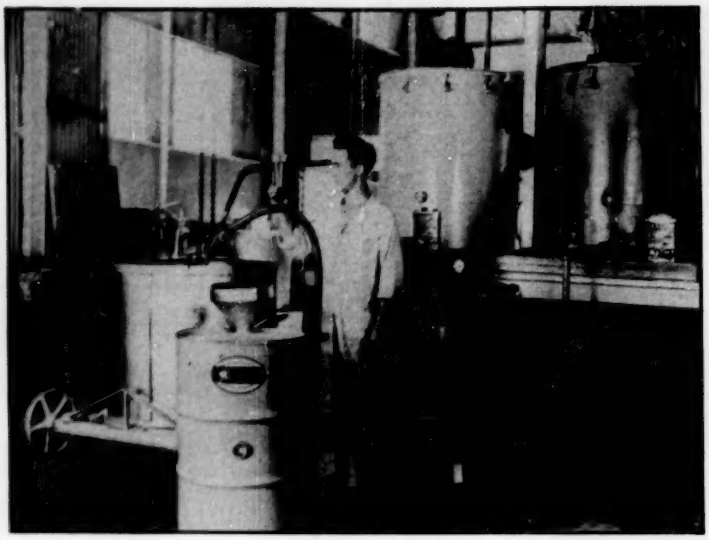
Locating in Tulsa, where they were well-known and respected, and close to domestic sources of supply like the lead, zinc, lithopone, titanium and aluminum in the Tri-State area, to the linseed oil from Kansas flax fields, and even to earth pigments from Arkansas, the Allied Paint Manufacturing Company set up a research laboratory and went to work to find the proper combination of the very best and toughest ingredients obtainable to make the best paint on the market for both industrial and home use. Having purchased an old abandoned dry-ice plant for their site, they went to work with their own hands, and with the aid of their wives and friends, converted it into a paint factory. Fortunately, it was located on a railroad, and as their business grew and their operations expanded, they eventually built spurs into the tract so that their materials could be unloaded, and their products loaded for shipment, right at their doors.

Some of their oils are shipped to them in fifty-gallon drums, but most of their oils, like linseed and soya, are shipped in railroad tank cars and pumped out into more recently built underground storage tanks from where they are piped underground to the various newly expanded paint, enamel and varnish plants, respectively. The dry ingredients like the earth and mineral pigments are shipped in bags or cartons, and the dry powdery or chunky solidified resins and rosins are transported in huge wooden barrels.

To make the paint, the resins and rosins are first added in various proportions to different amounts of one, two or more kinds of oil, and the whole mixed together in huge 210-gallon stainless steel kettles, and then cooked over gas fires until the mixture forms a thick, syrupy looking varnish. Allied paint makes some fifteen or more kinds of varnish alone from its 18 to 20 different kinds of rosins



Office and plant of Allied Paint Manufacturing Company, Tulsa, Oklahoma.



Inside the varnish plant where rosins and resins are mixed with oils to form paint.

and resins. Most of this is not to be used as we know varnish, for floors, furniture, and boats, but serves as a vehicle for carrying the pigments to make paint or enamel. Which kind is used for the various paints depends on the end results desired — whether for waterproofing, weatherproofing, high gloss, semi-gloss, flat paint, or enamel. These varnish mixtures, which are very volatile, are cooked for various lenths of time, sometimes for 24 hours, at temperatures ranging from 500 to 800 degrees Fahrenheit, depending on the kinds of resins and oils used. An average temperature might be 550 degrees at which it is held for a polymerization period to get the required viscosity or thickness, and then dropped to 450 or 470 degrees, when it is thinned with additional oils, or with alkyd resins which are sticky or adhesive chemical compounds to give the proper consistency to the product. Sometimes certain types of fish oil are used in making paints, but usually only vegetable oils. No mineral oils are ever used, as they would never dry.

This so-called varnish is then used to dissolve the pigments into a paste form, or at least wet them so that they will remain in suspension in the oil. The pigments might be already flour-fine, or small enough to go through a 300-hole-to-the-inch mesh, yet this would not be fine enough for Allied Paint's needs. For this company's enamels, they must be ground so fine that they will go through a screen mesh with 1,000 holes to the inch. For this, the paste is put into a paint-grinding, or pebble-mill, which is a huge revolving barrel-like machine filled with hundreds of flint-like pebbles which crush and grind even finer.

This mill holds about 250 gallons of the mixture. When it comes out of the pebble mill, it is sent through an even finer roller-mill, where the pigments are passed over from three to five super-hard steel rollers kept in such close contact that no light will pass between them. This machinery gets so hot from the friction and pressure that it must be cooled with circulating water. From the first roller, the pigments pass upward to the next roller, which is revolving at a different speed, giving them even more grinding action. By the time it has gone over the fifth roller, the pigments are as fine as it is possible to get them. The finer they are, the better they remain in suspension in the varnish, the better they cover the material to be painted, and the longer they last as an enamel. The thing that distinguishes enamel from ordinary paint is the fact that the pigments are ground finer, and the vehicle is of the best quality for durability, wearability, sheen and color retention.

After this paste is ground to its ultimate fineness, it is placed in a tub-like agitator where it is thinned down with more varnish, and stirred with an electrically-operated mixing paddle affixed to the center of the huge 55- or 110-gallon tub.

The basic colors made, besides white, are the dark primary blues, reds, and yellows, and the secondary greens. These whites and dark colors are canned directly from the tub batches. The tints are made from adding some of the dark colors to white paint, and the various shades are made by adding a little of different basic colors to the original darks or to the tints.

When the desired shades are thoroughly mixed, the paint is lifted in the tub by an elevator to the "filling station" where it is steamed and poured into cans, either five-gallon drums, or the standard one-gallon pails or smaller. From here it goes into the labeling room where labels are glued on by automatic machinery. Next, the cans are placed in shipping cartons and sent to the storage warehouse.

Now how do we know that they have made a good paint? Allied Paint Manufacturing Company maintains three laboratories, each with a specific task. In the first and smallest one, their chemists and technicians first formulated a product they tested in small batches. Sometimes they make up just a gallon or two at a time, using small-sized equipment similar to that just described in the factory. When a test batch is finished, they paint out small panels of wood and metal to prove its hiding and drying qualities, its weight, viscosity, or any other property it possesses. Then to test its durability, strength, color retention, and weather-proofness, it is put into a machine called a "weatherometer," which is located in a second laboratory. Small painted panels of wood and metal are placed in the machine which has various compartments to give simulated weather conditions. In one compartment, it gives out ultra-violet rays like that of sunlight; in another, it freezes to below zero; in a third, gives out over 100 degree heat; and in yet a fourth, pours down simulated rain as the panels revolve through the various sections. One hour inside this weatherometer is equivalent to 30 days' exposure on the outside of a house, or a 24-hour test is equivalent to two years' time as an exterior coating.

Their industrial paints are also painted out on panels and subjected to even more gruelling tests, including acids, alkalis, oils, and gasses found around the industrial and oil and gas fields which Allied Paint Manufacturing Company serves.

The Tulsa area being a great machinery and machine equipment manufacturing center, Allied Paint has been given many difficult assignments to manufacture special kinds of paints, and special shades and colors to identify the products of individual manufacturers, all of which paints would stand up under adverse climatic and atmospheric conditions, as well as under the peculiar circumstances of individual applications of the machinery in its own industrial field. That Allied Paint Company has succeeded in satisfying the many demands is evidenced by the fact that they make practically all the industrial paint used in the Midwest and Southwest areas.

Each batch of paint made by Allied has a code number stamped on the can lid, to indicate its type and the time it was made; and from every 55 or 110 gallon batch, a ½-pint sample can goes to the third laboratory for analyzing and testing as to its hiding, drying, and lasting qualities, as well as other physical properties. If it fails to meet the standards set up for it in the first laboratory, it is rejected. Should it not meet the standards, it might mean only that a certain ingredient was inadvertently omitted. If that is all that is wrong, the batch can be reworked by mixing in the missing item. However, it is not often that they find anything wrong with a commercial batch, as they never make up anything more if the first test-batch did not come up to their high standards.

In their laboratories, Allied Paint

(Continued on page 47)

PORT ACTIVITY

SOUTHERN PORTS INCREASE SHARE OF U. S. TRADE

Ports along the South Atlantic and Gulf coasts in the first two months of this year handled nearly a billion dollars worth of goods shipped to and from foreign countries, second largest amount in the United States.

Value of both imports and exports passing through the twelve customs districts comprising the ports operating on the two coastlines included Mobile, $26,000,000, Florida, $82,000,000, Georgia, $25,400,000, North Carolina, $11,600,000, South Carolina, $34,200,000, New Orleans, $253,000,000, Maryland, $146,700,000, Virginia, $122,600,000, Galveston, $207,100,000, Sabine, $20,400,000, Puerto Rico, $10,500,000, and Virgin Islands, $500,000.

An increase of some $72,500,000 in value of exports and imports handled in the twelve customs districts in January and February of this year over the same period last year was shown in the analysis prepared by Rufe B. Newman, Jr., manager of the Commerce Department field office in Jacksonville, Florida.

This year's shipments through the South Atlantic and Gulf ports constituted about 22.8 per cent of the world trade done in the nation as a whole in the first two months of this year which totaled $4,118,100,000. The North Atlantic coastal area, which includes Maine and New Hampshire, Massachusetts, Rhode Island, Connecticut, New York and Philadelphia, registered the largest value of foreign trade done, with $1,635,700,000, some 39.7 per cent of the national total.

The Mexican border did $102,400,000 worth, Pacific coast, $411,900,000, Northern border, $683,700,000, and Interior, $12,800,000.

Included in the value of such goods handled among the "interior" customs districts were $1,500,000 worth in Tennessee, and $700,000 in Kentucky.

The $72.5 million rise in trading done this year over last in the South Atlantic and Gulf ports was shared by nearly all of the customs districts in that area. In Mobile, for example, they were up around $6,000,000, Florida, $8,500,000, Georgia, $7,300,000, North Carolina, $7,400,000, and South Carolina, $9,700,000. Only decline of any consequence was in New Orleans, where value of the goods dropped by about $17,000,000.

ALABAMA

Mobile

Coal exports increase—The bulk material handling plant at Alabama State Docks, one of the largest, most modern plants of its kind on the Gulf Coast, scheduled for export during June one of the largest shipments of coal ever handled through the Docks.

J. P. Turner, State Docks General Manager, announced that 140,000 tons of coal were booked for export to Korea during the month.

"Due to its modern facilities and efficient service, the Alabama State Docks is the only port facility on the Gulf Coast handling these coal shipments and the June export of this commodity were the largest handled here in the past five years," Turner said.

On a year-round basis, the bulk handling plant at Alabama State Docks handles an average of 160,000 tons of imported bauxite per month, the largest import commodity handled at the $35,000,000 ocean terminal. Iron ores, including manganese and chrome, are the next major imports and average about 20,000 tons per month on an annual basis. Next in line is nitrate of soda and some 50,000 tons are imported each year.

Bauxite comes from British Guiana and the West Indies; iron ores from Liberia and Algeria; manganese from India, Chile and Cuba; chrome from Turkey; and nitrate of soda from Chile.

The bulk material handling plant at Alabama State Docks during 1951 enjoyed its largest year with 3,459,580 tons handled. The plant for the past several years has handled an average of 3,000,000 tons of ore per year.

Reciprocal trade with Turkey—The S. S. Aydin unloaded her cargo of chrome ore from Turkey at the ore terminal of the Alabama State Docks, and then shifted to the general cargo piers of the Docks to take on a shipload of creosoted telephone poles before departing for Turkey.

This operation involved two of the largest projects in the strengthening of the economy of Turkey—the overhaul of the country's communication system and the modernization of the chrome mines. The sale of the chrome ore is a big foreign exchange earner for Turkey. Moreover, chrome ore is one of the vital minerals which the United States must look to overseas sources for supply. As far the overhauling of the communication system, the southern states of the United States were benefited by the sale of telephone poles, once tall timbers in the forests of southern pine, to the Turks who were greatly benefited by the improced telephone communications.

FLORIDA

Jacksonville

Funds for cross-state canal study voted—State funds amounting to $15,000 are now available for economic surveys of the Cross-Florida Barge Canal and the Sanford-Titusville connection between the St. Johns and Indian River, Rear Admiral R. Malcolm Fortson announced.

Fortson, who is managing director of the Florida Ship Canal (Cross-Florida Barge Canal) Authority, said it is not known whether the money can be pooled with $8,000 of Federal funds being sought by the Corps of Engineers for a survey of economic benefits to be derived from the Cross-Florida canal.

If the funds cannot be pooled directly, it is believed state and federal studies can be made cooperatively to avoid duplication of effort. A total fund of $25,000 is considered necessary to make a complete study of benefits to be derived from an integrated system of Florida waterways.

Meanwhile, the National Rivers and Harbors Congress has placed the Cross-Florida Barge Canal on its top priority list for construction. The canal will link the Atlantic and Gulf Intracoastal Waterway systems.

Heavy newsprint imports—The newsprint warehouse at Commodores Point Terminal is one of the busiest terminals in the Southeast, and the reason becomes apparent in light of the heavy use of this

(Continued on next page)

PORT ACTIVITY

(*Continued from page 37*)

product in Florida.

Florida stands among the top states in newsprint consumption with a total of 124,800 tons costing about $15,000,000 used in the state last year. Consumption here is about double the average usage in the Southeast.

In actual volume consumed, only 10 states in the nation, each with a much greater population, ranked above Florida.

During 1953, the latest year for which complete figures are available, Jacksonville imported 37,068 tons of newsprint. Miami imported 56,358 tons, and Tampa 27,524 tons. The remainder received in the state was divided between Pensacola and Panama City.

Newsprint imports in 1953 were 17 per cent greater than 1952, for the state. Most of it came from Canadian and Finnish mills. Only 150 tons of domestic newsprint was used.

Each ton of newsprint used in Florida served the needs of 28 people. Stated another way, each Floridian used about 71 pounds of newsprint in 1953. This compared with a national average of 66 pounds and with 34 pounds for the average of the other Southeastern states.

Virtually all of the newsprint is used in newspapers, but a growing amount is consumed for shopping guides of various types, catalogs and government publications.

GEORGIA

Savannah

Facilities available — Five steamship agencies represent leading lines that maintain frequent scheduled sailings between Savannah and all ports of the world. Three long established and reliable stevedoring concerns are equipped to handle all types of cargo. Customs house brokers, freight forwarding and consular services are ample.

The waterfront terminals in the port of Savannah are:

Central of Georgia Railway—These facilities, including three slips, occupy more than one mile of river frontage, with 7,008 linear feet of wharfage. They are located immediately west of downtown Savannah and are under complete fire and burglary protection of the American District Telegraph system. There are 16 berths, 3 of which are served by marginal tracks. In addition, 2 berths are used by vessels of Seatrain Lines.

Adjoining these wharves are 704,407 warehouses and sheds having track capacity of 739 cars. Nearby yards have additional track capacity of 1,920 cars. Depressed tracks and concrete floor facilitate handling of cargo, and one shipside warehouse, accommodating four berths, is equipped with inside tracks which permit continuity of work without weather interference.

Georgia Export Packers, Inc., have a most modern export packaging plant at these waterfront terminals, offering manufacturers and others packaging, preservation and processing services at substantial savings in labor, materials and transportation costs.

The Cotton Producers Association has extensive cotton storage facilities on Central of Georgia terminal properties for concentration, storage and reshipment of cotton.

Two marginal railroad tracks extend along the apron of the wharf. Straddling these tracks are two new Gantry cranes of 35-ton capacities. Importers of heavy articles, ore and other bulk commodities, are discovering advantages of these facilities.

A high-density compress and a fumigating plant are a part of these waterfront terminals.

Atlantic Coast Line Railroad—These facilities are located approximately two miles downstream from the Central of Georgia Railway terminals. They consist principally of a wharf approximately 2,500 feet long, affording berthage for four vessels. There are three transit sheds having a total floor area of about 103,000 square feet. All berths are served by marginal tracks. There is also ample space suitable for open ground storage.

Seaboard Air Line Railroad—This is a privately operated terminal on the north bank of the Savannah River on Hutchinson Island opposite the city. There are approximately 1,000 feet of river-side wharves, consisting of two berths and a slip with three berths. There are also five transit sheds having a floor area of 252,500 square feet.

Another dockside facility is a huge warehouse designed for the storage of 50,000 tons of bulk fertilizer materials. This facility is 120 feet wide and 504 feet long, providing storage area free from posts. Its arrangement, conveyor systems, sacking machines and loading facilities have attracted nation-wide attention.

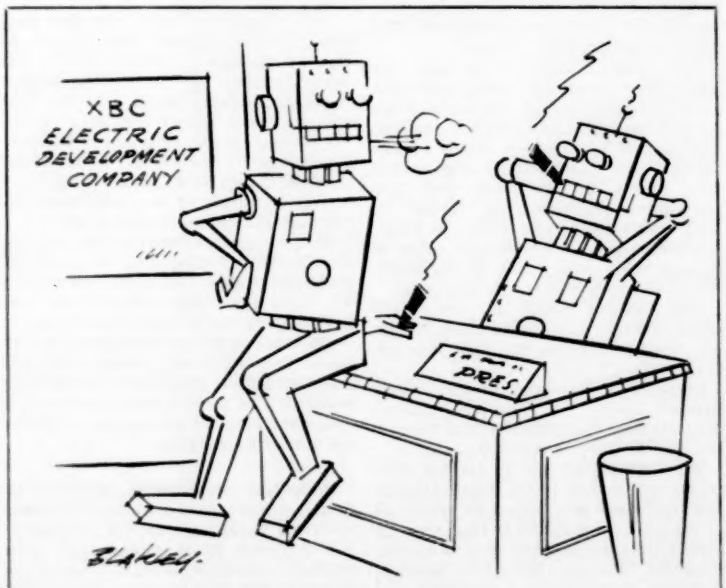
Savannah State Docks & Warehouses —These terminals are about two miles west of the city and are served by the five railroads entering Savannah, through the Savannah State Docks Railroad, a switching line. They are modern and under complete fire protection.

These facilities consist of a concrete wharf 2,047 feet long, with three transit sheds of 207,000 square feet total area. A vast warehouse system with more than 2,000,000 square feet of space is located adjacent to the waterfront and within mechanical handling distance. Suitable extensive acreage is available for open ground storage.

LOUISIANA

New Orleans

Industrial site leased — The National Lead Company of New York has leased an eleven acre tide level industrial site on the east side of the Industrial Canal from the Board of Commissioners of the



"So what else is new?"

PORT ACTIVITY

Port of New Orleans, it was announced by Edgar A. G. Bright, Vice-President of the Board.

The company's Baroid Division, according to Bright, will install initially such docks, bulkheads and other facilities as are necessary for the storage and transshipment of oil well drilling mud and chemical products which they supply to the oil industry of Louisiana. Construction work by National Lead Company will begin as soon as the current canal dredging is completed in late September.

Sufficient acreage has been leased by the company to provide for expansion should future developments in the oil industry make it advisable, Bright added.

Washington field representative appointed—Walter F. Rayburn is to be the Port of New Orleans' new field representative in the Washington, D. C. office, it was announced by Edgar A. G. Bright, acting President of the Board of Commissioners.

Mr. Rayburn is a native New Orleanian and in 1929 joined the Federal Barge Lines. In 1936 he was promoted to office manager at Memphis. In 1940 he was advanced to general agent at Dallas. From there he entered the service of the Department of Agriculture in 1952 as traffic adviser in Dallas and New Orleans. Later he was with the Navy Department's shipbuilding program at Pt. Pleasant, W. Virginia and Washington, D. C. In 1943 he became traffic representative for the Frisco Railroad in Dallas, and has served in the development of traffic in the Southwest area.

MARYLAND

Baltimore

Railroad enlarges grain elevator to port's largest—Enlargement of the Western Maryland Railway's grain elevator at Port Covington, announced by the carrier last February, was started early this month. Completion of the project sometime next winter will make the Port Covington facility the largest grain elevator in the Port.

The new addition, being constructed adjacent to the company's present 258-bin structure, will raise the storage capacity of the elevator to more than 5,000,000 bushels. It will consist of 32 new reinforced concrete storage bins, each of which will have a storage capacity for 33,000 bushels of grain. These bins will be 24 feet in diameter and 108 feet in height, and, together with the spaces between them will provide approximately 1,212,000 bushels of additional storage space. The work is being performed by the James Stewart Corporation of Chicago which was awarded the $1,300,000 general contract.

Also included in the new project is the installation of the latest type grain-car unloader. This dumper is expected to unload boxcars of grain at the rate of one every six minutes.

Deep water ship arrivals reach 1955 peak—Ship movements at the Port of Baltimore maintained the highest level of 1955 activity during May with 459 ocean-going vessel arrivals reported by the local Maritime Exchange. Last month's arrivals compare with 428 in April and 413 in May, 1954.

Two hundred ships visiting the Port in May were of American Registry, while 259 displayed flags of foreign nationals. Among the latter were 48 Norwegian, 34 Liberian, 22 British, 21 German, 20 Swedish, 17 Dutch, 16 Danish, 10 Honduran, 7 Italian, 7 Panamanian, 6 Greek, 5 Canadian, 5 Cuban, 5 French, 5 Japanese, 5 Venezuelan, 3 Belgian, 3 Colombian, 2 Argentine, 2 Brazilian, 2 Egyptian, 2 Moroccan, 2 South African, 2 Spanish, 2 Turkish, 1 Chilean, 1 Chinese, 1 Costa Rican, 1 Finnish, I Israeli and 1 Yugoslavian.

During the first five months of the current year, 2,095 vessels called at Baltimore to load or discharge. In the same period of 1954 arrivals aggregated 2,107.

Export coal loadings increase sharply—Baltimore's near dormant export coal trade which was suddenly activated in April continued an upward spiral during May. Data compiled by local coal pier operators shows export coal loadings at 253,708 tons on 27 vessels last month. This compares with shipments in April of 196,695 tons on 20 ships and 49,063 tons on seven vessels during May, 1954.

The upsurge in export coal movements through Baltimore during the past two months has raised the volume of such shipments in the January-May period to 598,666 tons, which is 37,964 tons above export coal cargoes loaded here in the entire year of 1954. Coal shipments in the first five months of last year amounted to 255,606 tons.

SOUTH CAROLINA

Charleston

New harbor channel — Preliminary work has begun on a $2 million project which will further shorten and improve Charleston harbor's main ship channel serving Cooper River docks. Already closer to the open sea than any other major Atlantic port, the project save turn-around time for vessels calling at Charleston.

Changes in the harbor will re-locate the main ship channel east of Castle Pinckney Island, following generally the old Hog Island channel through the middle of the harbor to the deep waters of Rebellion Roads.

Upstream in the Cooper River, contraction dikes (at right angles to the river flow) will shaft the river bed eastward at one point.

The work is the first major change in channel location in the harbor since the harbor mouth jetties were completed in 1895.

The new channel system will shorten the route from the sea to North Charleston by something over one mile. Under the plan, the channel will be maintained at 35-foot depth as far up the Cooper as Goose Creek.

The new system originated at Vicksburg, Miss., where a scale model of Charleston Harbor and its tributaries has been under study since 1949. These were supplemented by studies made here by the local office of the U. S. Corps of Engineers which Col. Clyde C. Zeigler heads.

Col. Zeigler said that the channel realignment and diking are designed to re-

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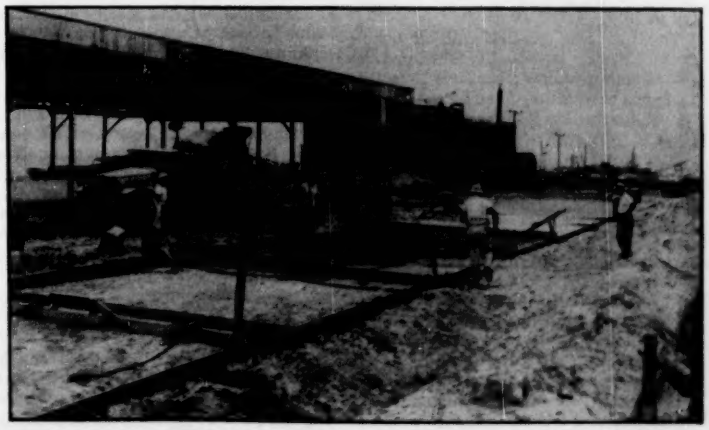


Gulfport, Mississippi. East pier construction work progresses. When complete the East Pier will provide two additional mooring spaces for vessels.

PORT ACTIVITY

duce annual maintenance work on the channels.

The new channel east of Castle Pinckney, permitting almost a straight route from the jetties to Drum Island, will bypass the harbor's largest shoal.

The old chanel will be abandoned but is expected to maintain itself to about 25 feet, Col. Zeigler predicted. Future studies, he indicated, could re-open the question of keeping both channels at 35 feet.

The Ashley River channel will be maintained at a 30-foot depth up to the Ashley River Bridge.

Maritime development group organized—The Maritime Development Association of South Carolina was recently formed with Thaddeus Street, Jr., president of the Charleston Stevedoring Company, as executive committee chairman.

The stated primary purpose of the organization is "furthering improvement and development of the ports and port facilities of South Carolina."

Other members of the group's executive committee are James J. Lamb of Palmetto Shipping Co.; Charles L. Paul III of James Doran Co.; John K. Burnette of the White Stack Towing Corp., and E. Randall Swan of the Pilots' Association.

An information and education program to better acquaint South Carolinians with state-wide benefits of South Carolina ports is included in the group's aims.

Baton Rouge

First grain delivered to new elevators—When this first load of grain was delivered this month at the Cargill grain elevator located at the Port of Greater Baton Rouge it marked the beginning of a new and bright economic era for Baton Rouge . . . an era which could prove as fortunate for our community as has the advent of the petroleum-chemical industry in 1910.

The two and one-half million bushel grain elevator is actually scheduled for completion in stages from June 15 to July 15. It has been constructed by the Greater Baton Rouge Port Commission at cost of $3,100,000 and will be operated as a public facility, on the basis of published rates and charges, by Cargill, Inc., one of the nation's leading grain merchants.

The grain elevator is but one of several facilities of the $12,500,000 Port now in the construction stage. An 8,000,000 gallon molasses terminal which will be connected to a finger pier extension of the general cargo wharf by pipeline is scheduled for completion by November 1.

February 15, 1956, is the completion date set for the modern public general cargo wharf, which also includes transit sheds, rail and truck service to the docking apron, and modern cargo handling facilities.

TEXAS

Houston

Port Bureau opened in Dallas—Taking a significant step forward in mid-May, the Houston Port Bureau opened a Dallas office to solicit cargo from North Central Texas and areas in adjoining states.

Some 300 attended the dinner hosted by the Port Bureau in the Dallas Athletic Club to announce the opening. Preceding the dinner, Braniff International Airlines toasted the occasion with a reception.

Vice Chairman W. N. Blanton of the Houston Port Commission, general manager of the Houston Chamber of Commerce for 22 years before becoming an independent contract driller of oil wells, said:

"Our hearts have been warmed by Dallas' hospitality.

"I want tonight to pay tribute to the incomparable Dallas spirit which has built a great marketing, insurance, finance, style and cultural center in mid-Texas—greatest city in our nation not located on deepwater."

VIRGINIA

Newport News

Bulk oil terminal under construction—The Esso Standard Oil Company in cooperation with the Chesapeake and Ohio Railway Company is now building a modern bulk oil terminal at the Port of Newport News which is expected to be ready for service on or before July 1st, 1955.

This modern facility has a pier 1,000 feet long at which the largest tankers may discharge their cargoes into storage tanks on immediately adjacent bulkhead. These tanks have a capacity of 510 thousand barrels of various types of oils including Bunker C, Galley, Diesel, and lubricating oils.

Pipes from these several tanks run to the Chesapeake and Ohio Coal Pier 14, thereby enabling ships to be loaded with their Bunker and Galley oils simultaneously with the taking of cargo. This saves ships from extra delay getting their fuel supplies from barges in the harbor. Ships can be serviced directly at this oil facility that may require fuel oil only.

Norfolk

Seek to lengthen Elizabeth River channel—What would be the industrial expansion potential resulting from extending the present 35-foot-deep ship channel about three miles up the Southern Branch of the Elizabeth River? The Hampton Roads Maritime Association is seeking the answer to this and other questions concerning the proposed project in a survey conducted among industries and maritime interests here.

The Association is trying to find out if new industry would result, if present industry would be expanded, and if the channel would be used for import and export traffic, and to what extent. The HRMA has pointed out that "practically all of the waterfront on the existing 40 and 35-foot channels in the Southern Branch has been developed, or is in the process of development by a major industry." The Association feels the extension is necessary to attract new industries. Depth of the present channel: 12 feet.

Florida begins shipping fruit to Malaya via Hampton Roads—The first shipment of Florida citrus products ever to be shipped to the British colony of Malaya moved out of Hampton Roads recently. The shipment: 275 cases of canned citrus products from the Florida Citrus Exchange, Tampa, Florida. The Dairy Service Corporation, of Washington, shipped 50 tons of Florida quick frozen orange juice through the port just prior to the shipment to Malaya. The "Cracker State Mariner" picked up the Malayan shipment.

Shipping up in March—March was the biggest month of the new year for shipping in Hampton Roads. Arrivals totaled more than 560 ships—as compared to 507 in January and 538 in February.

Hampton Roads exports gain 2,000,000 tons—Export tonnage at Hampton Roads gained 2,000,000 tons last year over 1953's figure of 13,378,744. Figures released by the Hampton Roads Maritime Association record 15,346,366 tons—principally coal, grain, and tobacco shipped out of the port in 1954. Coal exports amounted to 14,248,439 tons as compared to 12,377,-713 tons in 1953. Wheat jumped from 202,301 tons to 236,552 tons.

Richmond

Begin move for deeper channel to Richmond—Virginians interested in the development of the James River basin have asked Congress for $157,000 to survey the channel project. The aim: to clear the way for construction money to widen and deepen the channel from 25 to 35 feet between Hampton Roads and Richmond. The widening and deepening, according to Representatives Gary and Abbitt, Virginia Democrats, would open up the James River basin area to steel production.

SOUTHERNERS AT WORK

Georgia Power President Elected Head Edison Electric Institute

Harllee Branch, Jr., president of the Georgia Power Company, has been elected president of the Edison Electric Institute. The announcement was made recently at the closing session of the Institute's 23rd annual convention in Los Angeles. Vice President of the Institute for the past year, Mr. Branch succeeds Harold Quinton, president of the Southern California Edison Company, as head of the nation's important electric utility trade association.

Noted in the electric utility industry for his qualities of dynamic leadership, Mr. Branch is one of the youngest presidents the Institute has had. Born in Atlanta on June 21, 1906, he will shortly celebrate his forty-ninth birthday.

Active interest in community progress is characteristic of both Mr. Branch and the company he heads. Georgia Power is well-known throughout the nation for its Better Home Towns program and for other successful area and industrial development activities.

After completing his early education in the Atlanta schools, Mr. Branch went on to Davidson College in North Carolina, receiving his B. A. degree in 1927. In that year, he entered Emory University as a law student, and was graduated in 1931.

He had been a member of the law firm of MacDougald, Troutman, Sams and Branch, of Atlanta, general counsel for the Georgia Power Company, for 18 years when he was elected vice president and general manager of the company in 1949. Early in 1951 he was elected to the presidency.

Mr. Branch is also a director of the Southern Company and of Southern Services, Inc. In 1953 he was appointed a director of the Federal Reserve Bank of Atlanta and now serves as Deputy Chairman of the Board of that institution.

L. M. Smith Elected Director Edison Electric Institute

L. M. Smith, president of Alabama Power Company, was elected a director of Edison Electric Institute at its annual meeting in Los Angeles, California. Mr. Smith, Birmingham's "Man of the Year," only recently was appointed chairman of the Committee on Commercial Uses of Atomic Energy of the United States Chamber of Commerce. He is beginning his second year as a member of the board of directors of the U. S. Chamber. Long active in civic and religious life of Birmingham, Mr. Smith is a director of the Associated Industries of Alabama, the Birmingham Baptist Hospital, Jefferson County Community Chest, and the Birmingham Sunday School Council. He is president of the Birmingham Symphony Association and a member of the Birmingham Board of Education.

R. F. Jones Joins Temco As Assistant Vice President

Robert F. Jones, a pioneer in U. S. Navy development of remote-controlled aircraft, has joined Temco Aircraft Corporation as executive assistant to I. Nevin Palley, vice-president—engineering.

The recently retired Navy captain, whose work with pilotless aircraft began in 1936 and extended through 1953, was graduated from the U. S. Naval Academy in 1931.

He completed flight training early in 1933 and served for the next three years as a pilot and maintenance officer aboard the USS Lexington and the USS Portland.

His next assignment took him to the Naval Aircraft Factory, Philadelphia, where he remained for two years as project engineer for instruments and ordnance. Here he joined in developing some of the Navy's first control systems for pilotless aircraft.

In 1939 he took command of the Navy's first radio-controlled aircraft squadron. His unit was assigned to test the effectiveness of fleet anti-aircraft fire.

Jones' pilotless craft were directed against fleet units in simulated bombing attacks. These realistic operations helped guide Navy development of improved antiaircraft weapons and fire-control methods.

Jones was commended by the Secretary of the Navy "for bringing the development and operation of radio-controlled target aircraft to an outcome of practical usefulness."

Chemstrand Appoints Gayler Production Technical Manager

Roy G. Hemminghaus, vice president in charge of production for The Chemstrand Corporation, has announced the appointment of Dr. Cecil W. Gayler as production technical manager for The Chemstrand Corporation manufacturing plants at Decatur, Alabama, and at Pensacola, Florida. Dr. Gayler will report to Mr. Hemminghaus.

At the same time, Mr. Hemminghaus announced the appointment of Dr. Kenneth Johnson to the position of assistant plant manager of the Chemstrand Acrilan acrylic fiber plant at Decatur. Dr. Johnson will report to Mr. F. William Koster, vice president and plant manager.

Dr. Gayler has been serving as technical superintendent of the Chemstrand nylon plant at Pensacola. Before joining Chemstrand in May, 1951, he had served in supervisory capacities with American Viscose Corporation at Marcus Hook, Pennsylvania, for eight years. A native of Birmingham, Alabama, he was graduated with a Bachelor of Science degree from Howard College, Birmingham. He received a Master of Science degree from Georgia Institute of Technology and a Ph.D. degree from the University of Texas.

Rockwell Names O. W. Barnett Assistant Vice President

Orville W. Barnett, manager of Nordstrom valve distribution and oil field sales for Rockwell Manufacturing Company, has been named assistant to the vice-president, Meter and Valve Division.

Mr. Barnett will move to the new Rockwell valve plant at Sulphur Springs,

O. W. Barnett

Texas, according to Paul Kreuch, vice-president. He will continue to promote and co-ordinate oil field sales and will develop a training program for Rockwell and distributor sales personnel and customer representatives.

A native of Watonga, Okla., and 1934 mechanical engineering graduate of Oklahoma University, Mr. Barnett joined Rockwell shortly after graduation. After several years as a sales engineer in the Tulsa district, he was named gas products sales supervisor for that district in 1947. In 1950, he was transferred from Dallas, Texas, to Pittsburgh as manager of Nordstrom distributor sales.

John H. Dulany & Son, Inc. Announce Executive Promotions

The promotion of William H. McKenney to Director of Marketing for John H.

(Continued on next page)

(*Continued from page* 41)

Dulany and Son, Incorporated, Fruitland, Maryland, has been announced by Ralph O. Dulany, the food processing concern's president.

David L. Dulany, formerly manager of the company's Central Frozen Food Sales District, has been named as National Sales Representative, a position formerly held by Mr. McKenney.

J. Calvin Wallace has assumed the duties of manager of the Central Sales District, formerly held by Mr. Dulany.

William H. McKenney has been a member of the Dulany firm since coming with the company as a District Manager in 1950. He was appointed National Sales Representative in 1953 and Sales Assistant to the President in 1954. Prior to joining the Dulany Company, he was a member of the A & P organization for twelve years and was associated with the Birds Eye Division of General Foods Corporation for seven years. Presently a resident of Elizabeth, New Jersey, Mr. McKenney plans to move his family to Fruitland, Maryland.

David L. Dulany has been with the Dulany Company since 1942 (except for service in World War II), and has been in the sales department since 1949. He served as canned food salesman for four years, and as Frozen Food District Sales Manager since 1953.

J. Calvin Wallace was in the retail grocery sales field until he joined the Dulany Company in 1951. He has been a District Sales Representative in several districts since that time, and now becomes District Sales Manager in the area comprising Maryland, Virginia, and the District of Columbia.

Earl McGowin to Head SPIB Grade Committee

Earl M. McGowin, vice-president of the W. T. Smith Lumber Company, Chapman, Ala., has accepted the chairmanship of a Southern Pine Inspection Bureau committee that will undertake the task of revising the 1948 Southern Pine grading rules, according to announcement made recently by SPIB headquarters in New Orleans. In keeping with past custom, this Consulting Committee on Grading Rules will determine the changes that should be recommended to the Board of Governors of the Bureau. It was stated that the committee probably will not meet until sometime this fall, but in the meantime the members will work with the staff in analyzing proposed changes, and making such studies as may be required prior to consideration by the committee as a whole.

In accepting the appointment, Mr. McGowin said "I realize full well that this is a big assignment, but in view of the interest and enthusiasm that has been shown by the members of the committee, I am sure an outstanding job can be done in this next revision of the rules. The grading rules represent an extremely important sales mechanism. We must be certain that they fully reflect the needs of our trade and facilitate the specification and use of Southern Pine. As I view it, it is not necessary that a major operation be performed, but we do want to examine carefully the present rules and see what can be done to improve them. I think we should try to make our 'new model' the latest word in lumber industry grading rules."

Merritt-Chapman & Scott Elects McFarlin Executive Vice Pres.

The election of Carl McFarlin, Sr., as an executive vice president of Merritt-Chapman & Scott Corporation, in charge of the company's Chemical, Paint & Metallurgical Division, was announced by Louis E. Wolfson, president and board chairman.

Carl McFarlin, Sr.

Mr. McFarlin is president and a director of Tennessee Products & Chemical Corporation of Nashville, Tenn., which became a member of the M-C&S Chemical, Paint & Metallurgical Division following its recent acquisition by M-C&S through an exchange of shares. Devoe & Raynolds Company, Inc., similarly acquired by M-C&S this year, also operates as a member of the division.

Tennessee Products & Chemical operates 13 plants in the South for the production of heavy, aromatic and agricultural chemicals, metallurgical products, fuels and building materials. Devoe & Raynolds, with headquarters at Louisville, Ky., is one of the nation's leading manufacturers of paints, coatings and finishes, and has been active in the development of industrial resins. Founded in 1754, the company has eight plants.

Mr. McFarlin has been associated with Tennessee Products & Chemical since 1938, and has served as president for the past 16 years. He joined the company as vice president and general manager following purchase by Tennessee of the Whitwell Smokeless Fuel Company of Whitwell, Tenn., which Mr. McFarlin had founded in 1936.

A native of Birmingham, Alabama, Mr. McFarlin majored in mining engineering at the Alabama Polytechnic Institute, and successively held positions as mine foreman, superintendent, general superintendent and general manager before organizing the Whitwell Smokeless Fuel Company. He served overseas during World War I with the U. S. Army Corps of Engineers, and as a member of the advisory committee on Manganese Ore and Ferro Manganese of the War Production Board during World War II.

As executive vice president in charge of Merritt-Chapman & Scott's Chemical, Paint & Metallurgical Division, Mr. McFarlin will continue to make his headquarters at the Nashville offices of Tennessee Products & Chemical.

Freeport Sulphur Elects Robert D. Hill Controller

Robert D. Hill has been elected vice president and controller of Freeport Sulphur Company, Langbourne M. Williams, president, announced recently.

Mr. Hill succeeds Richard C. Wells who resigned as controller of Freeport to become president of National Potash Company, a newly formed company jointly owned by Freeport and Pittsburgh Consolidation Coal Company. A graduate of the University of Pittsburgh in the class of 1938, Mr. Hill has been associated for the last five years with the Taylor Wharton Steel Company, having served successively as treasurer, vice president and executive vice president.

Delta-C&S Air Lines Promotes Robert H. Wharton to New Post

Robert H. Wharton, Delta-C&S Air Lines assistant to the president in charge of employee relations since 1953, has been promoted to assistant vice president—personnel.

A native of Birmingham, Wharton joined Delta in 1936 as a traffic representative. He was transferred the following year to Monroe, La., then the headquarters of the airline, as an accountant, and was named chief accountant in 1942 and director of personnel in 1945. He supervised the transfer of 300 former Chicago and Southern employees to Atlanta following the merger of C & S with Delta in May, 1953.

Delta's employees totaled 150 when Wharton joined the company, compared to 4,457 today. Of these, 2,000 are stationed in Atlanta.

Frisco Railway Names Parker Assistant Vice President

H. B. Parker, assistant to the president of the Frisco Railway, has been named assistant vice president—accounting. E. R. Belt, vice president and comptroller, has announced.

NEW PRODUCTS

Dial Thermometer Check Well

The new Conax Check Well has just been announced by the **Conax Corporation, Buffalo 21, New York,** specialists in thermocouples and pressure sealing devices.

This new Conax Check Well combines sensitive thermocouple with dial type thermometer for quick visual check of critical temperature points. The unusual high rate of response is due to the small 3/16 in. O.D. thermocouple protection tube with subsequent low mass, low thermal inertia and light gage thermocouple element with hot junction bottomed in tube.

Conax sealing method and protection tube protects the thermocouple element from oxidation and corrosion caused by oxygen or toxic gases, and permits changing or removing the thermocouple element with minimum time loss.

Teflon is used as standard sealant in both thermocouple packing gland and thermometer packing gland.

Variable Volume Vane Pump

The Denison Engineering Co., Columbus, Ohio.—A new variable volume vane pump, which has been called the most versatile hydraulic pump ever developed, has just been introduced by the firm.

Named, the Multipump, this new development will deliver variable volume at constant speed, or constant volume at variable speed, it is claimed.

According to Paul W. Norris, Denison's Director of Sales, this new pump has the following advantages:

1. Finger tip volume control which is as easy to turn as a radio dial and works independently of compensator.
2. A compensator control that works at all volumes. A stop for minimum volume is available.
3. The pump holds volume within ±5 per cent over desired pressure, and designed speed ranges.
4. Delivers preset volume and preset pressure to system.
5. Gives the results of cylinder control by simply addition of on-off valve.
6. Eliminates need for servo-control, can be operated by simple push-pull cable.

Internal Helical Gear Broach

National Broach & Machine Co., 5600 St. Jean, Detroit 12, Michigan—A huge new broach that produces a 73-tooth automatic transmission internal helical gear nearly 6-inches in dia. and 1-in. wide in a single pass ready for shaving has just been designed and delivered. The new Red Ring broach, which is the largest ever made for internal helical running gears, is nearly 7-ft. long and weighs about 700 lbs.

The ultimate in precision tool manufacturing and heat treatment control was required to produce the unusual high speed steel broach which is made to "tenths of a thousandth" accuracy and enables the shaving cutter to finish the teeth on the SAE 5140 steel tubing gear blank to extremely close tolerances by removing only a few ten-thousandths of stock. The broach teeth were ground from the solid on a grinding machine equipped with specially designed headstock, lead bar arrangement, automatic index mechanism and wheel trimmers.

Giant Jungle Destroyer

R. G. LeTourneau, Inc., Longview, Texas—A giant jungle destroyer, traveling on the largest rubber tires in the world, has been purchased by a Pahokee contractor for major land-clearing work along the Florida-Georgia line.

Designed to uproot heavy trees and underbrush with push-button ease, the

"Tree Crasher"

six-wheeled Goliath has three times the wallop of an M-24 tank, yet is so light on its feet that it can roll over a pocket watch without damaging it, the company claims.

Wheels of the machine are spectacles in themselves, each measuring four feet wide and 10 feet tall. That's half again as wide and as high as the average doorway.

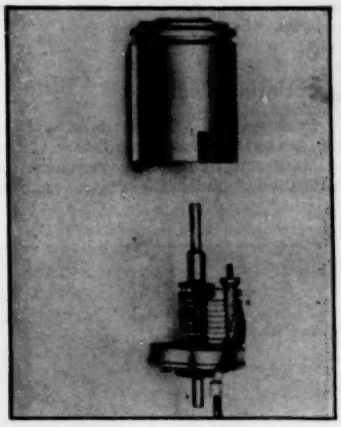
The monster, called a "LeTourneau Tree Crasher," was designed and built by R. G. LeTourneau, Inc., builder of the world's largest land-clearing equipment. Handley Construction Co., of Pahokee, has just purchased the machine and is having it delivered to the Florida-Georgia coastal area where it will be kept busy for the next six months.

Observers say the unit may well cause major changes in current-day land-clearing practices.

In operation the machine looks like a huge, magnified beetle searching out trees of all sizes and crashing them to the ground. The operator, perched in a balcony-high cab and fingering trigger-sensitive electric switches, maneuvers it directly into a large-size tree with the blade raised about 10 feet in the air. Almost without hesitation the tree bends, strains, then lifts its own roots as it crashes to the ground.

Miniature Torque Selector Switch

The Electro Tec Corporation of South Hackensack, New Jersey has recently developed a novel switch. This switch is available with several different brush and circuit combinations.



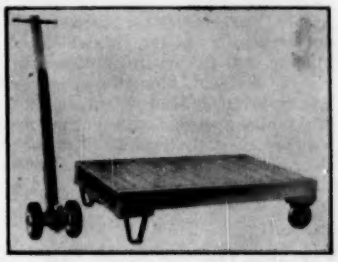
One inch diameter switch.

The illustration shows a selector unit with 10 input circuits and one output (break before make). It consists of a rotating element and stationary brushes. The rotating element is actually a slip ring assembly with a series of commutator segments inter-connected to the individual rings.

Precision instrument bearing are used to minimize the driving torque of the rotor. Extremely low contact resistance has been achieved by the use of gold alloy brushes for input and output. The entire assembly as illustrated is housed in a #10 syncho case. The over all size is less than 1 in. in diameter by 2¾ in. long.

Semi-live Platform and Lift Jack

The Hamilton Caster & Mfg. Co., Hamilton, Ohio—A lift truck system, con-



Lift jack and platform.

sisting of a patented lift jack and engaging bracket, in conjunction with semi-live platforms, is offered by firm, makers of industrial casters, wheels and floor trucks.

According to the company, the Hamilton heavy duty platforms, or skid trucks,

(Continued on next page)

NEW PRODUCTS

are unique in their design and construction, and the special features of the jack and bracket facilitates quick starting and ease of operation. One or more lift jacks can be used in combination with any number of skid trucks.

Imprinting Machine

Packmasters, 1656 Home Ave., Akron 10, Ohio—Automatic imprinting of complete descriptive data, government specifications, trademark design or other

Automatic imprinter.

data on heat-sealed paper or film packages, in addition to packaging and counting operations, can now be done with a new Packmaster machine equipped with a Markem Model 76A printer. The Model 50 forms, fills, imprints and counts packages from 3 x 2 in. to 6 x 6 in., at rates from 40 to 80 per minute depending on material used and object being packaged.

Combining package imprinting with other operations in this manner reduces marking costs to a minimum, according to the firm. Flexibility is achieved by the use of Markem masterplates, typebars, rubber printing plates, etc., which can be quickly changed when imprint requirements change. Automatic synchronization of printing head with variable feed of machine assure exact registration, and inks are specially formulated to produce clear, durable imprints in any of numerous colors.

Portable Electric Hack Saw

Key-Hak Division, 1321 Hanover Ave., Allentown, Pa.—A new heavy-duty, self-powered, portable, electric hack saw, designed for making straight, circular and random cuts in practically any material, including stainless steel, tempered aluminum, Transite and mild steel.

This compact, self-contained unit measures 15½ in. overall and weighs 6¾ lbs., permitting it to be used in close quarters. The forward positioning of the pistol grip handle provides excellent balance, easy maneuverability and affords complete control when making cuts in any direction. With this new Key-Hak all 360° cuts can be made without changing hand positioning.

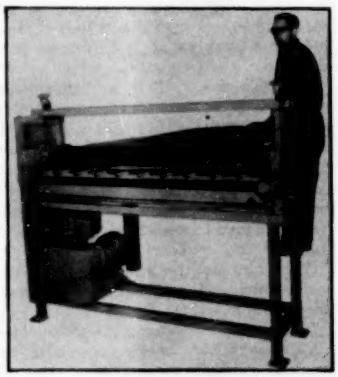
Strict adherence to "in-line" design permits the operator to make clean cuts to close tolerances, the firm claims. Edge dressing is unnecessary, as the powerful, high speed reciprocating action (2500 strokes per minute) provides a burr-free edge.

Light Duty Roller-Coater

A new light-duty roller coater, designed especially for all types of light-duty production or for laboratory or experimental work, is announced by the **Union Tool Corporation, Warsaw, Indiana.** Identified as Model No. 5, this line of light-duty roller coaters is an addition to the company's regular line of larger models.

The new Union Model 5 is adaptable for application of any type of viscous compound to either or both sides of any metal or other flat material in thicknesses up to four inches. The model lends itself readily to a wide range of adaptations to fit any particular coating requirement.

Specifications are as follows: Frame—rugged steel electrically welded and rigidly joined and trussed to eliminate vibration and to assure positive alignment of rolls. Motor—¼ hp. with chain



Roller coater.

drive. Bearings—self-aligning ball bearings well shielded from coating materials. Rolls—neoprene, buna or gelatin covered 4 in. dia. coating rolls; 2¾ in. dia. plated doctor roll. Four production types are offered: 5-A and 5-B are double coaters, each having two coating and two doctor rolls; 5-C top single coater and 5-D bottom single coater are equipped with one coating roll, one doctor roll and one backup roll.

Portable Rail Cutter

Ty-Sa-Man Machine Co., Knoxville, Tenn.—A portable, electric, motor-driven rail cutter has been developed by the Corps of Engineers' Research and Development Laboratories, Fort Belvoir, Va., to speed-up the construction and rehabilitation of military railroads.

Manufactured under contract by the Ty-Sa-Man Machine Company of Knoxville, Tenn., the machine can dry cut a 152-pound per yard rail in less than 45 seconds. It uses a resinoid bond cutting wheel, 30 inches in diameter and ¼ to ⅜ inches think, which was developed especially for the machine by the Raybestos-Manhattan Company of Passaic, New Jersey.

Capable of handling two 39-foot rails ranging from 70 to 155 pounds per yard simultaneously, the machine is said to produce a clean, burn-free surface satisfactory for welding.

Continuous Seam Welding Mill

The Pandjiris Weldment Company, St. Louis, Missouri, announces that continuous seam welding tube mills, capable of welding pipe or tubing 4" to 48" diameter, with metal thickness 1/16" to 1/2", have been added to the company's line of production welding equipment.

In this new method, the tightly butted edges of the tube seam move in a perfectly straight line without twisting, turning, weaving, or wandering, and with great automatic accuracy. The seam to be welded passes continuously under stationary welding equipment.

The welding method used can be the concealed or submerged electric arc—heliarc—atomic hydrogen—gas welding or brazing.

Double Miter Cutting Machine

This double miter cutting machine, manufactured by the **Stone Machinery Company, Manlius, N. Y.,** cuts two 45° miters in one fast pneumatic, fully automatic cycle. Designed for high-volume production, the DM-10 model is particularly useful to the sash and window manufacturing trade, as it cuts aluminum, brass and copper extrusions as well as plastics.

This model is activated by foot pedal valve control and completes a full cutting cycle in less than two seconds. Safe and easy to operate, each machine has an automatic, double work clamping device that can easily be adjusted to any size or shape of stock. The DM-10 cuts 2¾ in. wide x 2 in. high extrusions, 2 in. tubing in non-ferrous metals. It can be made to order to cut material up to 5¾ in. high by 2¾ in. wide.

Automatic Hopper Feed

Feedall, Inc., Willoughby, Ohio—This Unit is designed to handle either rolling or sliding parts and to feed them automatically at a predetermined rate to a

production machine thus making that machine fully automatic.

Parts are picked up from the hopper by cleats on the moving conveyor and elevated to the delivery point from which they are fed to the production machine. With a loading height of 36 in. this unit features low loading height and variable delivery point.

Hopper capacity is 4 cu. ft. Work range is up to 3 in. diameter and 1 in. length on rolling parts and up to 1 in. diameter and 3 in. length on sliding cylindrical parts. The Unit is driven by a ¼ hp. 3-phase motor operating through a variable speed drive.

Chip Absorbing Set-Up Blocks

Jergens Tool Specialty Co., 712 E. 163rd Street, Cleveland, Ohio, announce the development of new aluminum alloy multi-step set-up blocks which save machine set-up time and protect expensive machine tables from scratches and nicks.

Softer than the machine table, these new blocks actually absorb metal chips and even if dropped will not injure the machine table.

According to the manufacturer these new set-up blocks withstand great weight under clamping pressures and are designed for use on jig bores, boring mills, drill presses, milling machines, planers, etc.

Jergens Set-Up Blocks hold work from zero to 3 in. and can be mounted on 3 in. high Jergens Risers and thus pyramided from zero to any desired height. It is further said that the tee-shape of the Jergens Riser Block requires minimum table space and allows rotation of the set-up block to coincide with the sturdy tee base for maximum rigidity.

Aluminized Fire Suit

A new aluminized fire suit has been announced by **Wheeler Protective Apparel, Inc., of Chicago.** The new suit is designed to offer adequate protection for fire rescue workers. It incorporates an air respirator which enables the worker to breathe for extended periods of time while inside the suit.

The Wheeler suit is intended for such users as air stations, animal breeding farms, armed service bases, auto speedways, factories, fire stations, horse racing tracks, institutions, riding stables, ships, yachts, stock yards and other places where fire would result in disastrous consequences.

The new suit, called the Wheeler "Fire King," is made from aluminized tropic-weight asbestos fabric which reflects up to 90% of the heat generated in the fire. Rescue is thus possible even in direct flame. The lining of the suit is of neoprene coated fiberglas for additional resistance to heat, abrasion, water, oil, grease and acids. This also forms an effective vapor barrier. There is a built in Bullard hard hat to protect the wearer from head blows. A pyrex vision piece in the helmet is replaceable and is ventilated to prevent fogging.

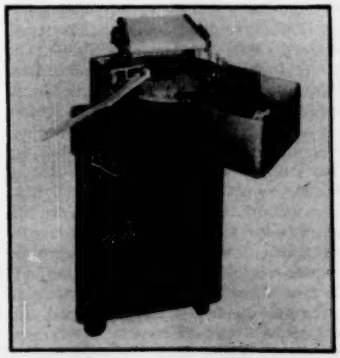
NEW PRODUCTS

The Wheeler fire suit incorporates an air respirator and other safety features.

The Scott Air Pak, self-contained breathing equipment is a part of the complete suit. The Air-Pak is worn underneath the suit and provides enough air for approximately 15 minutes' work inside the suit at extreme exertion. The Air-Pak offers protection against gas, smoke, dust, or fumes and will operate successfully in temperatures as low as 20 below zero. Cool air, not oxygen, is used in the Air-Pak, making for safer operation in flames. Operation of the unit is relatively simple; it does not require complicated training.

Automatic Rotary Wiping Machine

Conforming Matrix Corp., 335 Toledo Factories Bldg., Toledo 2, Ohio — The tedious and time consuming method of hand wiping stove, heater and refrigerator knobs, etc., after spray painting or dipping has been made unnecessary by a newly developed automatic rotary wiping machine.



Automatic wiping machine.

Designed and produced by Conforming Matrix Corporation, the machine provides for high production wiping after mask controlled spraying which holds the paint to the immediate area.

The variable speed table, mounting 24 revolving work holders, permits production rates from 700 to 3600 wiped pieces per hour. The operator can sit at the machine and feed from the hopper. The parts moving under the wiping cloth, are revolved until clean and then removed from the spindle by the unloading device.

The machine takes up less than 5 square feet of floor space and is powered by a ¼ hp. explosion proof motor. It is mounted on casters for ready portability.

High-Bay Lamp Changer

A new product, designed to keep pace with advances in industrial lighting, has been announced by the **Electrical Division of McGill Manufacturing Co., Inc. of Valparaiso, Indiana.**

The product is a new lamp changer head, designated 155-C, and built especially for the R52, 500-watt lamp being used in high-bay reflector lighting. Flexible, rubber-covered metallic fingers, held together at the top by a coil spring, slip over the lamp easily and grip it firmly for removal or installation.

The lamp changer head is used with the standard lamp changer pole, made by McGill Manufacturing Co., Inc., in 5-foot, interchangeable sections. Sections are securely locked together by a spring-actuated button which also permits quick disassembly. Each section is insulated for positive protection against shock from exposure on contact of changer pole or head to live wires.

Polyethylene Bottle Carriers

Availability of its new product—safety-type bottle carriers fabricated entirely from polyethylene—is announced by the **American Agile Corporation, P. O. Box 168, Bedford, Ohio.** These carriers are designed to protect acid- or similarly-filled glass bottles or carboys from breakage.

The unit shown is a standard model and is designed to hold a five-pint standard acid bottle. It is of welded construction with a centering ring which allows the bottle to be packed with ice or other coolerant and in addition, protects the bottle from shock. Dimensions: 8⅛ in. O.D. in shell; ¼ in. wall; 10-7/16 in. high; with an overall height of 18-1/16 in.

Both impact capacity of the polyethylene material and the design of the carrier afford maximum protection to the

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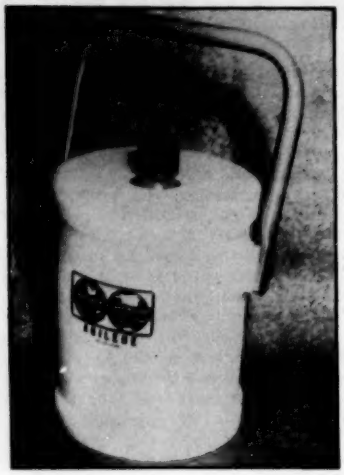
NEW PRODUCTS



Plastic bottle carrier.

container handled. Handles are strongly attached; and the top holds the mouth of the inner bottle in a centered position, even in a pouring position.

Wide Field Tube

Bausch & Lomb Optical Co., Rochester, N. Y.—A macroscope which provides an erect, unreversed image useful in production line operations, inspection, and quality control has been announced.

Magnifications of 10X, 20X, or 40X are available, suitable for a wide variety of

Macroscope.

industrial applications. Literature D-1052, which describes the macroscope and its uses, is available from the manufacturer.

Because the macroscope provides a normal, erect image and focuses simply by sliding in its holder, operators do not have to be specially trained. Inspection procedures are speeded because of the unusually wide area visible through the instrument's optical system.

Working distance between the optical tube and the object under study is long enough to permit easy movement of irregularly shaped pieces or the macroscope itself. Precise measurements of objects under the macroscope are possible with scales, which are available as accessories.

Light Weight Pipe Fittings

The first complete line of light weight carbon steel welding fittings for gas distribution systems has been introduced by **Tube Turns, Louisville, Ky.**, a division of the National Cylinder Gas Company. They are designed to be employed with the light weight piping now being made by several of the larger mills.

John G. Seiler, executive vice president of Tube Turns, points out two reasons for the production of light weight fittings:

1. The availability of gas at high pressure from the transmission companies makes possible substantial economies. Piping of smaller diameters may be used, and light weight material is suitable. Construction costs are considerably lower than when gas is transmitted at low pressure large cast iron mains, as in the past.

2. Concurrent with the introduction of light weight piping and fittings, greatly improved means of providing cathodic protection and better wrapping techniques have been developed.

The new light weight welding fittings are being produced in 3" through 24" sizes, and in wall thicknesses that permit them to be joined with light weight piping of the dimensions now being manufactured.

Direct-Tapping Unit

A new "Controlled-Air-Power" device for direct-spindle tapping without the use of tapping heads or clutches has been introduced by **The Bellows Company, Akron, Ohio.** Basically the unit consists of a Bellows-Locke Model 5-E Drill Unit with a special, inline-mounted, G.E. hi-slip motor for 220/440v., 3-phase operation. Standard shaft speed is 1140 rpm; however, other speeds are available. The unit is furnished with a motor control cabinet containing a magnetic motor reversing contactor, line overload protection, control transformer, and terminal strip. The control transformer delivers 115v., single-phase power for all control circuits.

The unit features rapid air-powered approach to the work and smooth hydraulic feed through the work at any pre-set rate desired. Spindle traverse is adjustable from zero to three inches; thrust is approximately three times applied air pressure. A broad differential in advance and retract piston areas provides thrust step-down for proper tap "back-out."

Low Cost Marking Pen

W. J. Ruscoe Co., Akron 1, Ohio — A new low priced indelible marking pen has just been introduced to the market by the company, National Distributors of Goodyear PLIOBOND. The Ruscoe Marker needs no refilling. The patented felt point mechanism insures an even flow without loss of ink and avoids any mess or trouble. The giant supply of ink lasts about a year of normal use.

It is available in Black, Cardinal Red, Sky Blue, Yellow, White and Sea Green. The marker is said to be versatile and distinctive. It can mark indelibly, dries instantly on any surface—wax, grease, glass, plastic and it can even write on frost covered packages.

It can be used also on the production line for identification and coding. It can be used as a shipping room Marker, and is most effective as a show card sign maker. Artists can also create most unusual and distinctive work with this Marker.

Two Pole Circuit Breaker

A new two-pole common trip circuit breaker, for use in panelboards and load centers, has been announced by R. C. Hanna, Manager—Marketing, **Trumbull Components Department, General Electric Company, Plainville, Connecticut.**

Designated Type TQL, the new two-inch breaker consists of two pole units with an interlocking trip mechanism assembled as a single unit. It will fit load centers or panelboards designed to take one-inch Type R or Type TQL circuit breakers.

The new two-pole Type TQL is available in six ratings from 10 to 50 amperes for 120/240-volt a-c operation. It has an interrupting rating of 5,000 amperes a-c. All ratings are listed by Underwriters' Laboratories, Inc.

Specifically designed to provide adequate protection for equipment and personnel wherever two-pole common trip circuit breakers are required, the new TQL should meet or exceed local construction code requirements in any section of the U.S., according to G-E engineers.

Excessive current in either pole of the new Type TQL breaker trips both poles simultaneously; this greatly reduces the risk of accidental shock.

Thermal and independent magnetic trip elements provide protection against both short circuits and sustained harmful overloads. Momentary overloads, such as those caused by motor starting, will not trip the breaker. The new breaker is trip-free: that is, it will trip out even if the handle is held in against a circuit fault.

Oklahoma Paint Firm

(*Continued from page 36*)

Company not only tests their own paints, but those of their competitors. By breaking down the paints, enamels and varnishes, they can analyze their various component parts and tell almost exactly what ingredients and what formulae were used in any kind of paints.

Now half of their business is dealerships, where they have 700 dealers in the six-state area they serve in an exclusive sales territory: Oklahoma, Texas, Kansas, Arkansas, Missouri, and New Mexico. They are proud of the fact that they have never lost a dealer-customer. They also have seven factory branch stores of their own, located in Tulsa and Oklahoma City, Oklahoma; Ft. Worth, Dallas, and Pampa, Texas; Fayetteville, Arkansas; and Springfield, Mo. The other half of their business is government work.

But anyone who knows the management of Allied Paint is not surprised when that company brings out a new kind of paint, because it is headed by a group of experienced paint men who, by courageous initiative, dared to buck national competition and discouraging economic conditions during the depression years to organize a company to make specialized paints. For ten years previous, David M. Boylan, Ainslie Perrault, and Raymond M. Gunn had saved their money planning it. When they finally did strike out for themselves in March, 1939, they lost several kettles of varnish by flash fires in their experiments. Their own personal experiences had been in the sales and managerial ends of a paint business rather than in the cooking end. However, within a few weeks, they were fortunate in having a young chemical engineer by the name of Emerson Fowler search them out and tell them how to cook varnish. They hired him on the spot, and never lost another kettle of varnish. He is now their plant manager, and has taught his brother, Roy Fowler, to cook varnish so well that now Roy is varnish plant manager, and, in turn, has taught many another varnish cook.

Soon afterward, the company also obtained the even higher technical guidance of Dr. Arthur T. Saunders, a graduate of the University of Michigan, who came recommended to Allied Paint as one of the top ten paint chemists in the nation.

Raymond M. Gunn is vice president and Industrial Sales Manager; R. E. Stanford, vice president and Dealer Sales Manager; and George Houck, Office Manager and Secretary. There are now about 125 employees in the organization, and the management claims they are like one big happy family. All receive bonuses four times a year—the factory and office workers' based on the amount of paint made, and the salesmen and branch store employees on the amount sold. Altogether, they do about $3,000,000 worth of business annually.

LATE NEWS BRIEFS

Texas Eastern Launches $70,838,000 Conversion

Contracts have been awarded by Texas Eastern Transmission Corporation for the construction of the facilities which were certificated by the Federal Power Commission recently to permit the company to maintain its natural gas delivery capacity after the reconversion of the major portion of the Little Big Inch pipeline from natural gas to petroleum product service. Contracts for the pipeline construction were awarded with the project divided into six pipeline spreads and five river crossing jobs. Brown & Root, Inc., of Houston, wil furnish field supervision for the pipeline work and will, with its own crews, construct the compressor stations.

The over-all cost of the new natural gas facilities is estimated at $70,883,000, which, in addition to a new 30-inch pipeline, includes eight new compressor stations, 100 miles of additional lateral and connecting smaller diameter lines, and the addition of compression to certain existing stations. These new facilities will increase the capacity of Texas Eastern's 30-inch pipeline by an amount equal to that now being carried by the Little Big Inch (approximately 200,000,000 cubic feet per day).

The approved project calls for a new 30-inch pipeline which will extend some 377 miles in a generally northeasterly direction from the company's existing line near Beaumont, Texas, through southern Louisiana, southern and central Mississippi to a point of connection with the southern terminus of the company's existing 30-inch pipeline at Kosciusko, Mississippi.

The route of the pipeline crosses four large rivers and one bayou . . . the Neches, the Sabine, the Atchafalaya, and the Mississippi rivers and Bayou Courtableau. In each case for added protection two lines will be laid under the rivers.

The new compressor stations will have a total of 91,400 horsepower. These new compressor sations plus the installation of 36,020 additional horsepower in Texas Eastern's existing stations will produce a total of 127,420 horsepower.

Two new reciprocating compressor stations will be installed in Texas, one near Booth, and another near Vidor. The Booth station will be powered by two 1,100 horsepower reciprocating engines. The Vidor station will use five 1,000 horsepower reciprocating units. In addition, an 8,800 horsepower reciprocating compressor station will be constructed near Holbrook, Pennsylvania. New electric motor driven centrifugal stations will be built at Egypt, Mississippi, Mt. Pleasant, Tennessee, and Tompkinsville, Kentucky. Each of these stations will contain one 15,000 horsepower electric motor driven cintrifugal compressor unit. Two gas turbine centrifugal stations, located at Athens, Ohio, and Owingsville, Kentucky, will be included in the new system. Each of these stations will contain two 7,600 horsepower gas turbine centrifugal compressors.

In addition to the new stations, present construction plans call for the addition of some 36,020 horsepower at existing stations. Additional reciprocating compressors will be added at Kosciusko, Mississippi, and Danville, Kentucky; the Kosciusko station receiving a 5,000 horsepower increase and the Danville station receiving a 3,520 horsepower increase. Additional centrifugal horsepower will be added as follows: Barton, Alabama, 7,500 horsepower; Gladeville, Tennessee, 7,500 horsepower; Wheelersburg, Ohio, 7,500 horsepower; and Berne, Ohio, 5,000 horsepower.

$6,000,000 Pentaerythritol Plant in Missouri Planned

Hercules Powder Company has announced plans to start immediate construction of a new plant for the production of pentaerythritol (PE), representing a total investment of approximately $6 million.

Completion of this plant, scheduled for late next year, will make Hercules the world's largest producer of PE, doubling the company's present annual capacity.

Located in the Midwest, on the site of an existing Hercules anhydrous ammonia plant at Louisiana, Missouri, the plant will have an annual production of 24 million pounds of PE and 100 million pounds of formaldehyde, a basic raw material for PE.

Pentaerythritol is used in paints, varnishes, and lacquers, in core oils, plasticizers, resins, adhesives, and for other chemical derivatives.

Anhydrous ammonia will continue to be produced at the plant at the current rate of 40,000 tons a year, for agricultural and industrial users.

The new PE plant will incorporate all of the latest developments in process and equipment which have grown out of Hercules' operations at Mansfield, Mass., the company's first PE plant in operation since 1943 and now producing approximately 24 million pounds of PE a year.

LATE NEWS BRIEFS

$8-10 Million Industrial Park Development for Fort Worth

Plans for the development of an unique 83-acre $8,000,000 to $10,000,000 industrial park site—the largest industrial development ever proposed in the Fort Worth area and the only one of its type in the Southwest—were announced by E. L. Baker, who will develop the district, and the Industrial Department of the Fort Worth Chamber of Commerce.

The development, to be known as Richland Industrial Park, will be located in the village of Richland Park, eight miles northeast of downtown Fort Worth in a locale that has been designated by many as the "number one industrial area in Greater Fort Worth."

Grading has already begun over the entire site and construction of the first building—a 101,000-square foot structure that will cost $400,000—will begin June 13, the announcement said. The building will have a 600-foot front and a depth of approximately 161 feet. It will be of architectural concrete construction with a steel frame. The floor will be at railroad car level and the structure will have a 12-freight car capacity.

The plan of development is a result of intensive research by Baker and Chamber of Commerce officials into industrial developments throughout the nation. Richland Industrial Park is the culmination of a dream harbored by Baker for many years to combine his real estate and nursery experience into an industrial development that was both utilitarian and attractive.

Industrial landscaping — trees, shrubs and grass—will adjoin each street of the area and protective restrictions have been imposed by Baker to assure that the planting and grass areas will be maintained as such, so that the area may develop as a parklike industrial section.

The plan of development for Richland Industrial Park, as described by Baker and the Chamber of Commerce, calls for division of the area into 100 desirable industrial sites. More than one site, however, will be available to an individual industry if desired.

The area will be developed on a lease basis, in line with present industry preferences, so that no capital investment will be required by the industrial users. The sites and the buildings to be erected upon them will be available under long-term leases with options to buy. The developers will build on each site to specifications of the lessee.

Service tracks, connecting with Rock Island lead tracks, will be available to serve each industry individually and the lead and service tracks will be so located that each site will be served from the rear, keeping the front open to maintain the parklike appearance.

Connors Steel Plans $2,500,000 Expansion

Announcement of a $2,500,000 expansion for Connors Steel Division of H. K. Porter Company, Inc., was made recently by T. M. Evans, president of H. K. Porter.

The expansion of Connors will center around the establishment of the first fully integrated cold finished steel bar operation in the South. Included in the program, which is expected to be completed early in 1956, are additional scrap-handling facilities, an additional electric furnace, improved rolling facilities plus equipment for the new cold finished bar mill.

Improvements and additions to present rolling facilities are also a part of the expansion program.

B. C. Blake, vice president and general manager of Connors, said the new facilities will boost Connors ingot production from 85,000 tons per year to about 110,000 tons.

This expansion is the second undertaken by H. K. Porter at Connors since the company was purchased in 1950.

Two Way Moving Sidewalk Developed

A new type of "moving sidewalk" that can go around corners and carry passengers in two directions was unveiled to the public this month by Hewitt-Robins, Inc., manufacturer of rubber and conveyor machinery products.

The new design solves various technical problems associated with earlier passenger conveyors and promises to clear the way to increased mechanization of pedestrian traffic at airports, large shopping centers, railroad terminals and subways. It is designed to run at a speed of one and two-third miles an hour, about average walking speed, but can be adjusted to run at faster or slower speeds if desired. Passengers in a hurry can walk while they ride and thereby double their rate of travel.

Three of the new conveyors will be installed in the new $10,000,000 air terminal to be built at **Dallas Love Field, Dallas, Texas.** They will carry

(Continued on page 55)

Economic Crisis May Face Georgia Shortly

Cotton agriculture and cotton manufacturing in Georgia face the possibility of a disaster, industry spokesmen warned recently. They added that the situation might result in an economic crisis for the state before long.

Spokesmen blamed the situation on action of U. S. representatives in agreeing to deep tariff reductions on Japanese textile imports into this country at the recent Geneva conference of the General Agreement on Tariffs and Trade.

This action, textilists said, may force many cotton-using mills in this state and elsewhere to close down or curtail operations. This, in turn, would mean a sharp drop in the markets for cotton fiber.

M. M. Bryan, Jr., president of the Cotton Manufacturers Association of Georgia and head of The Jefferson Mills, Jefferson, termed the tariff cuts "devastating." He said they were "a staggering blow not only at the textile manufacturing industry but at the cotton growers as well." He added that the cuts affect "80 per cent or more of our entire fabric production."

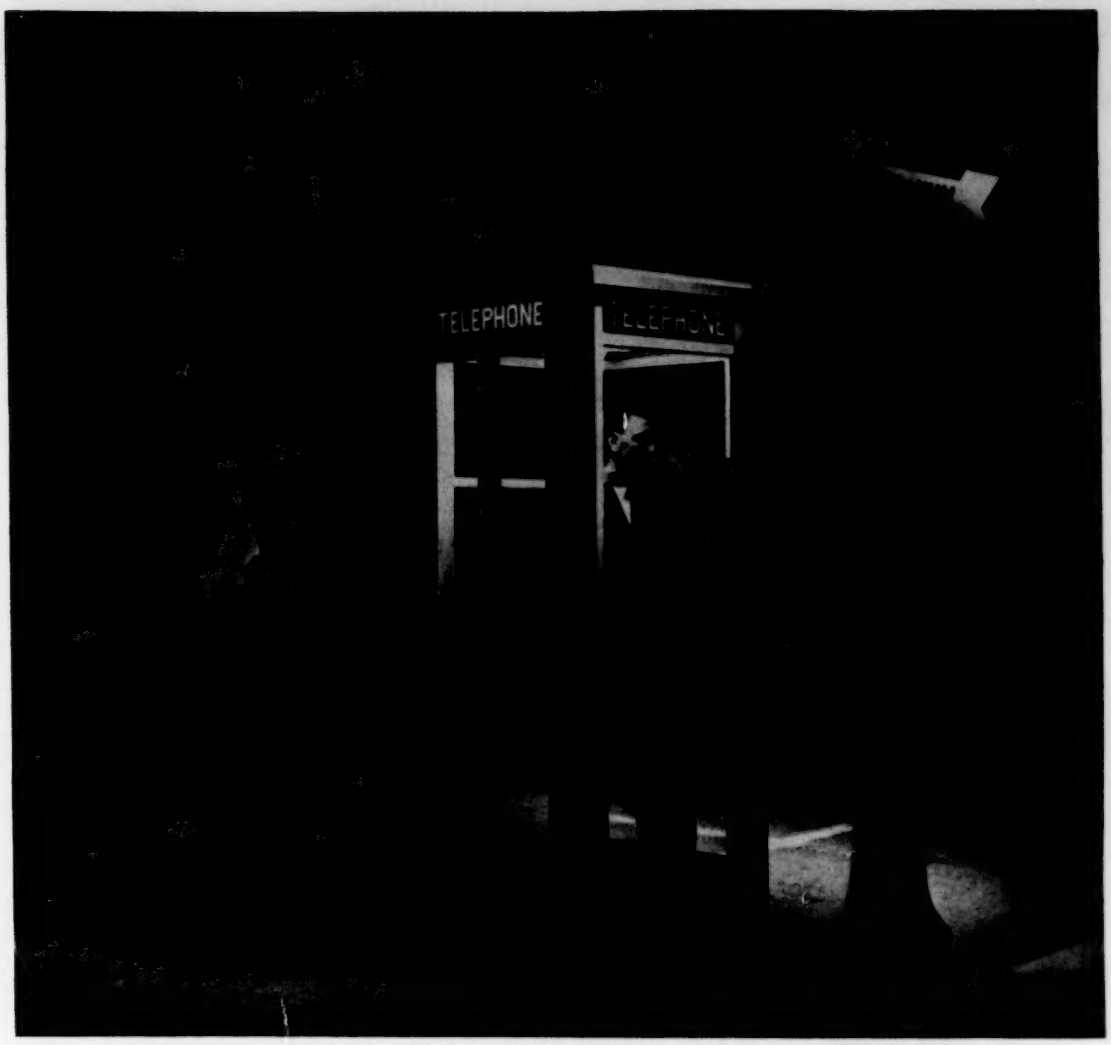
T. M. Forbes, the association's executive vice president, said unless the industry gets some relief before September 10—scheduled effective date of the new tariff rates—it is conceivable that cotton mills in Georgia and elsewhere may soon be forced to curtail or shut down because of inability to compete with low-price, low-wage Japanese imports. Some mills already have closed.

Huge Textile Plant Planned For Barnwell, South Carolina

Textron American, Inc., recently announced plans for a new 400,000 sq. ft. mill at Barnwell, S. C. The announcement was made by Mr. R. L. Huffines, Jr., President of Amerotron Corporation, the textile division of Textron American, who stated that this site was chosen after considering many others because of its natural advantages and particularly because of the widespread community interest in having Amerotron locate there.

"Amerotron plans to make this the most outstanding woolen unit in the world. We plan to manufacture staple and semi-novelty fabrics on a basis that will recapture the preeminent position previously occupied by American Woolen Company in these fields," said Mr. Huffines, who added, "the company's high styled and fancy woolen fabric will be made in those existing mills whose operations can be profitably continued."

The plant will be completely integrated with spinning, weaving, dyeing, and finishing all housed under one roof. The contract for the general construction has been awarded to the Daniel Construction Company of Greenville, S. C. Lockwood Greene Engineers, Inc., will design the plant and Barnes Textile Associates, Inc., are the technical advisors.



A LIGHT IN THE DARK—More and more outdoor telephone booths are being placed at convenient locations. They are available for service 24 hours a day. They supplement the hundreds of thousands of telephone booths in buildings, stores, hotels, gas stations, airports, railroad stations and bus terminals.

Brother to the Phones at Home

No matter where you go, you are never far from a public telephone. North, south, east and west, they are conveniently located to serve you.

They are all brothers to the telephones in your home or office and connected in a nationwide family. From them you can call any one of fifty million other telephones nearby or across the country . . . and thirty-five million in other countries.

So the next time something comes up when you are away from your home or business—or you're thinking of someone who would like to hear your voice—just step in a convenient telephone booth and call.

You can travel far in a few minutes—save steps, time and money—and get things settled while they're fresh on your mind.

BELL TELEPHONE SYSTEM
"It means so much to keep in touch"

Nuclear Reactor Airlifted From Knoxville to Geneva

The research reactor the U. S. Atomic Energy Commission will exhibit at the International Conference for Peaceful Uses of Atomic Energy was airlifted to Geneva, starting from Knoxville, Tenn., June 30, Lewis L. Strauss, Chairman, announced.

The reactor was flown over in two U. S. Government aircraft and reassembled on the grounds of the Palais des Nations, where the conference will be held.

Built in record time in the past three months at the Commission's Oak Ridge National Laboratory near Knoxville, the reactor was successfully tested, passing all safety requirements, before it was dismantled and crated for transatlantic airlift.

The Oak Ridge National Laboratory is operated under contract with the AEC by Union Carbide and Carbon Corporation. The reactor project has been under the direction of Dr. Charles E. Winters.

Stylon Plans to Double Employes in Florence Plant

The Florence plant of Stylon Southern Corp. will be more than doubled in capacity under an expansion program announced jointly in June by officials of the corporation and officials of the City of Florence and the Florence Chamber of Commerce.

Final details for the project were completed by officials of the company, the city and the chamber when Gearhart & Otis, Inc., 74 Trinity Place, New York, placed in the hands of Mayor Walter N. Harrison a check for $20,000 guaranteeing sale of the $1,950,000 of bonds for the addition.

The Florence plant now employs about 200 workers and will expand its employment to about 400 when the expansion program is completed.

Approximately $600,000 of the expansion funds will go into buildings and the remainder into machinery.

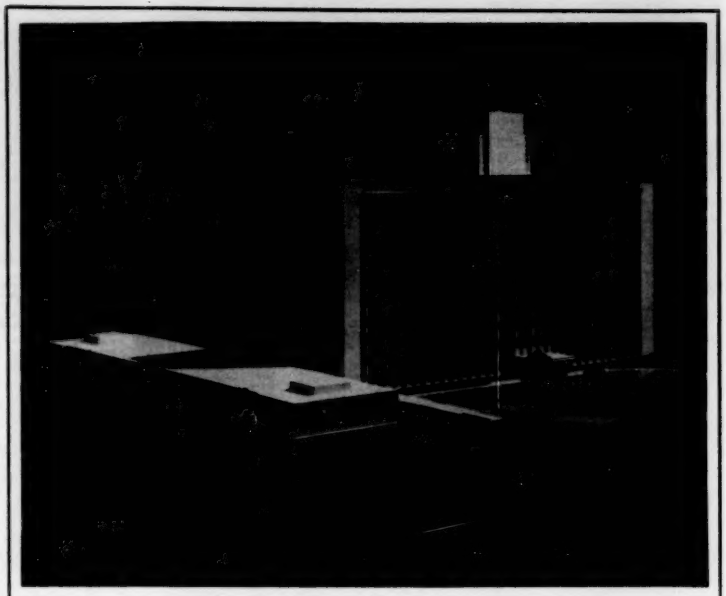
Several months will be required to construct the additional building facilities and to purchase and install the additional machinery.

This means that employment at Stylon Southern Corp., which manufactures ceramic wall tiles, will surpass that of the original Stylon Corp. in Massachusetts. The Milford plant employs about 250 persons.

Textile Machinery Firm To Build in South Carolina

Saco-Lowell Shops of Boston, Mass., manufacturers of textile machinery, have announced the purchase of over 300 acres of land near Earley, S. C., as a new plant site.

Daniel Construction Company of Greenville, S. C., will build the new plant, and Lockwood Greene Engineers, Inc., of Boston, New York and Spartanburg, are Architects-Engineers on the project.



Proposed Charleston Headquarters for Gas Co.

United Fuel Gas Company bought a portion of the South Ruffner, Charleston, West Virginia, property known as the Ward farm in 1952. The remainder was bought in 1953, making a total of 19.8 acres available as the building site.

The proposed Charleston headquarters building took shape to suit its particular need, to make the most efficient and economical use of space. The result is a two-unit building with 265,000 gross square feet.

The main unit is a rectangular shell ten stories high, topped by an offset eleventh floor for executive offices. Reaching somewhat higher than this is the "service core" at the eastern side containing elevators, stairs, janitor closets, toilets, freight and mail stations, air supply, plumbing, telephone and electric services. Dimensions of this unit are 290' x 56'.

At a right angle to the main unit will be a one-story structure with basement and connecting vestibule. This unit is 300 feet long and 70 feet wide. The first floor will contain a cafeteria for employees at one end, seating 400 persons, and an assembly room at the other. It also will seat 400 persons. It will be made available for public and community functions. The basement or ground floor contains an automobile service garage and a large storage area, all of which are connected through above and underground passageways to the main unit.

Exterior finish of the main unit will present a broad expanse of windows in aluminum frames and a "skin" of light blue porcelainized aluminum. As viewed from the outside, walls requiring windows will be light and colorful in contrast to the solid simplicity of those walls which do not require windows. This honest expression of wall function provides a handsome exterior. Window panes will be blue-tinted and heat absorbing. The windows pivot 360 degrees to make all washing possible from inside.

This porcelainized aluminum has been chosen as a facing material because it is light in weight and because it presents a surface which will retain its color and will not corrode under local atmospheric conditions.

Structural columns will be convex in shape and faced with warm buff porcelainized aluminum "skin." At alternate intervals are concave columns carrying air conditioning ducts and piping, faced with the light blue porcelainized aluminum "skin."

Ceramic veneer of a warm buff color will cover the center core and the stairs at both ends of the building. Exterior finish of the cafeteria and assembly room will be treated similarly in ceramic veneer and aluminum.

Except for partitions in the core, lobbies, official and executive offices, the interior walls will be movable. This will make the general office area fully adaptable to change. Offices may be enlarged or subdivided as future developments may dictate. All lighting, heating and air conditioning is laid out to allow this change.

Pedestrian entrances are to be provided at three points for those arriving by public transportation.

Business—We're All In It!

"When we separate the word 'BUSINESS' into its component letters, B-U-S-I-N-E-S-S, we find that U and I are in it. In fact, if U and I were not in BUSINESS, it would not be BUSINESS; therefore, we must keep U and I in it.

"You will also note that U comes before I and that the I is silent. It is seen but not heard. Also the U in BUSINESS has an I sound which indicates that it is a union of the interests of both and that when properly united, BUSINESS becomes harmonious and profitable." (From **Chattanooga Commerce,** publication of the Chattanooga Chamber of Commerce, Chattanoogans, Inc., and Committee of 100.)

Fitzgerald, Georgia Will Profit From Grain Elevator

In Fitzgerald early this month one of the largest grain elevators in the Southeast went into operation.

The new facility, which belongs to the Dixie Peanut Co., is designed for the marketing and storage of both grain and peanuts. It has a capacity of 525,000 bushels and is expected to draw from a 150-mile radius.

The installation is expected to mean thousands of dollars in marketing advantages to the grain and peanut growers of south Georgia.

The concrete structure with its 100-foot silos and bins is a match for what one sees in the Midwest, where the elevator long has been a landmark on the horizon.

L & N Releases Sound Film "The Old Reliable"

First venture into the motion picture field has been made by the Louisville & Nashville Railroad with the release of their new film, "The Old Reliable."

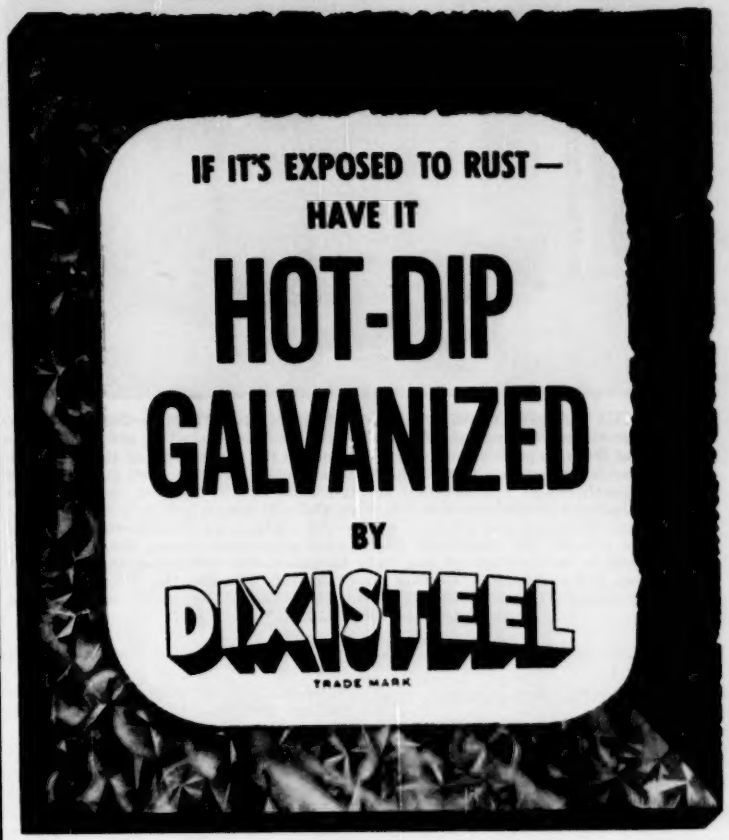
The 26-minute, 16mm sound and color film gives a graphic and detailed pictorial account of the activities of the Company along nearly 5,000 miles of railroad in 13 states.

This documentary type movie portrays a modern railroad at work—as it goes about being a public servant in the territory which it serves.

The film is being made available for showing to clubs, fraternal organizations, schools and other groups without charge.

American Road Builders To Hold Conference in Tenn.

Plans are completed for the American Road Builders' Third National Conference of County Highway Engineers and Officials, to be held in Gatlinburg, Tennessee, September 12-14. More than 500 highway officials from counties and communities across the country are expected to gather in the picturesque town in the heart of the Great Smoky Mountains to hear national leaders on local highway problems.



In One of the South's Largest Hot-Dip Galvanizing Tanks

Double-dipping accommodates pieces up to 45 feet long

Add years of useful life to iron or steel. Give your products new sales appeal. Genuine hot dip galvanizing will do it.

Our new facilities have greatly increased our capacity and made it possible to hot dip galvanize much larger items. You get a more uniform, cleaner job; fast service.

Call, write, or wire for full information and prices.

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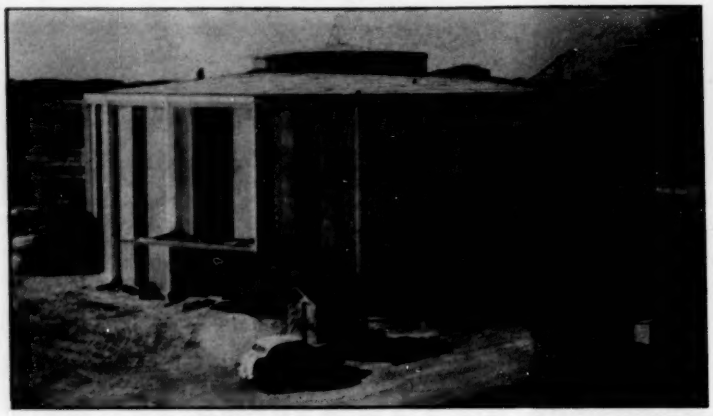

"DOUGHNUT" LABORATORY TAKING SHAPE IN OKLAHOMA—One would never think the attractive structure above was once an 80,000-barrel oil storage tank on Continental Oil Company's tank farm at Ponca City, Okla. One of the most unusual research laboratories in the world, the structure is being built at Ponca City from the partitions of a dismantled storage tank. It will be used by Conoco for petrochemical and production research work and will have a hole in the middle like a doughnut—from ground level to roof—with offices and laboratories arranged around the ring in the doughnut. Faced with aluminum siding, the three-story building will be air-conditioned and fully insulated and will house approximately 60 scientists and technicians. Costing approximately $500,000, the "doughnut" laboratory is expected to be completed by summer. Work on erecting and equipping the laboratory started last August.

Chemical Firm Announces Aid-to-Education Program

Gifts totaling more than $300,000 for educational grants to colleges and universities for the advancement of science and engineering are announced by The Dow Chemical Company. Allocations have been made to various institutions throughout the country for the academic year 1955-56.

In announcing the aid-to-education program, Dr. Leland I. Doan, Dow president, said that although the company has been providing financial assistance in the field of higher education for many years, the program has been largely exploratory until recent years.

"Dow Chemical recognizes there is a growing need for industrial assistance to colleges and universities," Dr. Doan said. "As a result, our aid-to-education program has increased steadily over several years, with the 1955-56 grants substantially higher than amounts allocated in previous years.

"Our company takes the position that industry has an obligation to society to help support education as an important instrument in industrial and cultural progress. Besides, Dow has a vital stake in educational development and the maintenance of high standards of teaching because our company, along with other industrial concerns, looks to our schools for a continuous flow of trained people to fill technical and other positions."

A major phase of the aid-to-education program is the authorization of $133,500 for distribution to 38 colleges and universities for the establishment of graduate fellowships and undergraduate scholarships and to two educational foundations for use in assisting deserving students.

Another part consists of $167,500 allocated to 19 institutions, most of it earmarked for their unrestricted use in current expansion and operating programs. The bulk of these contributions goes to Case Institute of Technology, Cleveland, where the company's founder, Dr. Herbert H. Dow, was educated, and to the Michigan College Foundation with 14 liberal arts colleges participating.

The company carefully analyzed the problems and needs of the 19 institutions and concluded that the gifts should be made without restrictions as to their use, allowing educational authorities to specify how the money is to be applied.

Asphalt Roofing Plant To Build in Savannah

Johns-Manville will build an asphalt roofing plant and warehouse near Savannah, Georgia, with production expected by early Fall, 1956, it was announced by A. R. Fisher, President.

The Savannah plant is the second major expansion announced by Johns-Manville this month. Earlier the company disclosed plans for construction of a large insulating board plant in Canada at North Bay, Ontario.

More thn 100 people will be employed at Savannah with an annual payroll of $400,000. Expected future expansion will increase both employment and payrolls, Mr. Fisher said.

Located on a 58-acre tract one mile north of the City of Savannah, plant buildings will cover more than 100,000 square feet of floor space. Johns-Manville will produce there its nationally-known line of asphalt roofing products and will warehouse a number of asbestos-cement building products for distribution in the Southeast.

"The Savannah plant is Johns-Manville's first move into the Southeast and the decision to build in the territory has followed the tremendous expansion in that part of the country since World War II and the unprecedented demand for the company's building products," Mr. Fisher said.

The Savannah operation will be the twenty-third Johns-Manville plant in the United States and Canada and the company's eleventh building products plant in this country. The company also operates three mines in the United States and Canada, large Research and Engineering Centers in Manville, New Jersey, and has extensive interests abroad.

Mr. Fisher pointed out that "since the end of World War II, Johns-Manville has spent about $150,000,000 in a continuing and extensive expansion program in this country, Canada and abroad to provide greater stability for its 20,000 employees as well as an increasingly attractive investment for its 14,200 stockholders."

Maryland Checks Beach Erosion With Low Cost Asphalt Groins

King Canute was a piker compared with Walter Hopkins, deputy chief engineer of the Maryland State Road Commission.

Hopkins last month commanded the tide to stop rising and made it stick—long enough to install five more sturdy asphalt groins north of Ocean City. Behind temporary sand barricades, erected at low tide by bulldozers, work crews toiled swiftly and efficiently to complete a beach-preservation project started a year ago.

The new construction brought to 39 the total of these revolutionary, low-cost weapons which the state has brought to bear against an old enemy, the predatory Atlantic Ocean. Thirty-four of them were installed last year from Ocean City north to within a couple of miles of the Delaware State line. The new additions have closed that small gap on the shoreline.

The groin work at Ocean City was conducted in close cooperation with the engineers of The Asphalt Institute at College Park which is actively engaged in experimental research on the use of asphalt in this field of hydraulic engineering.

"I believe we may at last have found a partial solution to an old and vexing problem," said Robert K. Williams, Jr., of Richmond, Virginia, Middle Atlantic district engineer for the Institute, who has been a daily observer of the work at Ocean City.

"Sand asphalt groins are promising to furnish beach protection at a price commensurate with the land values involved," Williams explained, pointing out that construction of an asphalt groin costs less than one-fourth as much as such old-style structures as timber, steel and rock.

$6,000,000 Love Field Terminal Planned for Completion in 1957

Contracts were awarded last month for a new $6,515,000 terminal building at Dallas Love Field, scheduled for completion in the summer of 1957.

The new terminal will be unique, in many respects, among the major airport terminals of the United States.

It will be a single-level operation. There will be no stairs for the air traveler to climb, and no escalators for him to ride. Automatic doors will open as the traveler approaches them. Moving sidewalks will reduce walking distances. Inbound and outbound passenger traffic flows will be separated. Passenger traffic will be separated from ramp vehicular traffic. The terminal will have complete year-round air conditioning, from front door to most distant loading gates.

The Dallas City Council, meeting in special session recently, awarded the general construction contract to T. C. Bateson Construction Company of Dallas, on its low bid of $4,243,899.30.

Dallas Love Field's new terminal will be erected on the southeast side of the airport, between the present instrument runway and the parallel instrument runway which is to be constructed in the future when increasing traffic volume requires it. Such an "open system" of parallel runways will eliminate cross-traffic between the terminal and the two principal runways. The front door of the terminal will be five and a half miles from Dallas' downtown hotel area.

The terminal building will contain approximetaly 412,540 square feet of floor area of which 196,805 square feet will be ground floor area. A separate but adjacent mail and cargo building will provide 42,890 additional square feet of floor area.

Architects for the Dallas Love Field terminal are Thomas D. Broad, Donald S. Nelson and Jack Corgan, of Dallas, with James C. Buckley, Inc., of New York as consultants on functional design. Forrest and Cotton of Dallas are engineers for the terminal area development.

Multi-Million Dollar Plant For Chemical Firm at Mobile

The Stauffer Chemical Co. will build a new multi-million-dollar plant on a site adjoining its present plant at LeMoyne, 20 miles north of Mobile.

Hans Stauffer, president of the company, made the announcement in May at New York.

While the exact amount to be invested in the new plant was not made public, it was stated that it will be an entirely new and separate unit, utilizing a new manufacturing process.

The new plant will produce carbon bisulphide, as does the present plant. Charcoal and sulphur are the raw materials in this process and in announcing the new project, President Stauffer emphasized Mobile's "favorable raw material position, particularly with respect to natural gas and sulphur."

Completion of the new plant is scheduled in the spring of 1956.

It was pointed out that carbon bisulphide is used extensively in the manufacture of viscose rayon and the big Courtaulds rayon plant is directly south of the Stauffer plant.

Houston L&P Passed 1,000,000 Kilowatt Mark

Houston Lighting & Power Company marked a significant milestone in its own growth, and that of its service region, recently. On Monday, June 27, between 1:00 and 2:00 P.M., net electrical load on the company's system passed the 1,000,000 kilowatt mark for the first time in its 73-year history. The company's average load for that hour was 1,008,600 kilowatts. It continued to climb during the two succeeding hours, amounting to 1,012,300 kilowatts between 2:00 and 3:00 P.M., and to 1,015,500 kilowatts between 3:00 and 4:00; then declining below the million mark as industries, office buildings and others began to decrease operations.

To gain an understanding of how much electricity a million kilowatts is, the company pointed out that a kilowatt is equal to 1000 watts, so that lighting 10 million 100 watt light bulbs simultaneously would amount to a million kilowatts of electrical load. This, incidentally, would be enough to light up more than 1500 Rice Institute football stadiums.

ONE BIG DIFFERENCE IN

SOLITE® LIGHTWEIGHT MASONRY UNITS

IS THE RAW MATERIAL

The huge chunks of slate blasted from the earth at our plant operations may look like any other slate. But there the comparison ends.

We searched—not for days and months—but for years before we found this specially resistant formation of slate with all the necessary properties. We needed a slate of consistent quality and strength into which we could manufacture all the most wanted features in a masonry unit . . . including light weight, strength, durability, fire-safeness, sound and insulative qualities. This is why the search was long. But as a result, today you have a building block of dependable quality and consistency. Solite—the masonry unit with that million dollar look!

KNOW HOW SOLITE IS DIFFERENT . . . *and you know the secret of better building at a lower cost!*

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REMEMBER—Architects and engineers are professional advisors. Regardless of what type of construction you are interested in, consult them. They will be glad to help you build better.

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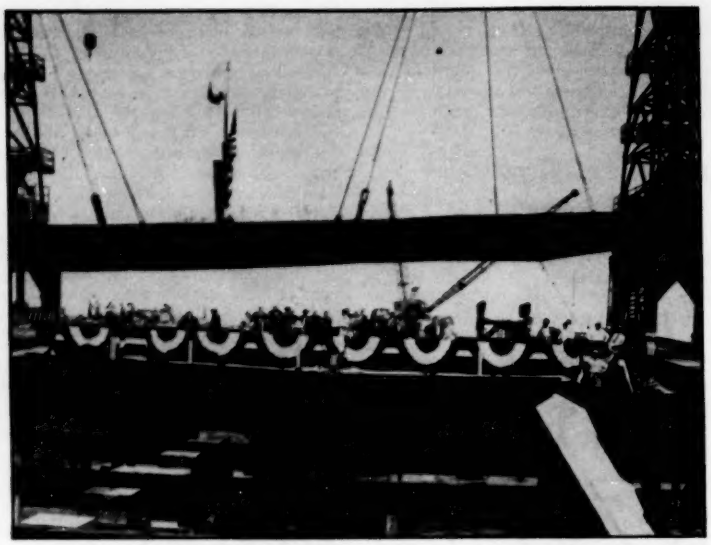

Baltimore, Md.—The keel plate of a 32,650-ton Cities Service supertanker, the largest ever built in the port of Baltimore, is lowered into position at the Bethlehem Steel Co.'s Sparrows Point shipyard. This will be the largest vessel of its type to fly the American flag. When completed she will carry finished Petroleum products from Lake Charles, Louisiana, to Atlantic seaports north of Cape Hatteras.

$8,000,000 Expansion of Facilities Planned by C&P in Maryland

The board of directors of the Chesapeake and Potomac Telephone Company of Baltimore City, at its regular meeting recently, approved expenditures of $8,200,000 for expanding and improving telephone service in Maryland.

The largest single amount approved was $5,200,000 to construct and rebuild telephone facilities required for a number of small projects throughout the state.

An allocation of $51,000 will provide underground telephone cables for serving Civil Defense in Baltimore and assure continuity of essential communications.

In the rapidly growing Baltimore Suburban area, appropriations totaling $1,900,000 were made for expanding telephone facilities at Arbutus, Clarksville, Glen Burnie, Linthicum, Severna Park, Sparrows Point and Pikesville.

Authority was given for an expenditure of $253,000 to change telephone service to dial operation at Mechanicsville and Hughesville. This sum will provide for two new buildings, housing the latest type dial equipment and for rebuilding and expanding outside wire and cables to take care of the need for more telephone service.

Also in Southern Maryland, to meet continuing heavy demand for telephones, $173,000 was allocated for constructing additional cable pole lines in the La Plata area.

Drug Firm Plans Expansion Of St. Louis Facilities

The Rexall Drug Company has announced that it will move its entire Boston manufacturing operations to St. Louis in a $1,465,000 expansion.

This will mean, according to James Knowles, Jr., vice-president of Rexall, that all of the company's toilet goods manufacturing is being moved to the Missouri city.

In addition to plans to expand present plant facilities for the increased operations, Rexall expects to build a new warehouse this year. It will be the firm's largest and its one-story building will contain 150,000-square feet of space on the main floor and 15,000-square feet of balcony space for offices.

The vice-president in charge of Midwest sales will have offices in this new building. The sales district will cover Chicago, St. Louis and Ft. Worth.

Textile Office Building Completed in Aberdeen, N. C.

The $145,000 office building addition to Amerotron Corporation's textile plant in Aberdeen, N. C., was scheduled for substantial completion July 1, Daniel Construction Company of Greenville, S. C., announced. Construction on the building started April 10.

Air-conditioned throughout, the totally enclosed one-story and basement structure provides 14,000 feet of office space. Lighting in all areas will be fluorescent.

Architects for the building were the owner's engineers. Amerotron Corporation is the textile division of Textron American Incorporated.

Monsanto Chemical Plans Interim Plant at Texas City

An interim plant for the production of a new high density, boilable polyethylene plastic will be in operation by the end of the summer at Monsanto Chemical Company's Texas City, Tex., plant, it was announced.

The announcement was made by R. K. Mueller, vice president of the company and general manager of the Plastics Division.

A small pilot plant producing the new product has been in operation at the company's Chemical Research Department at Dayton, Ohio, for several months, Mueller said.

Zeigler Announces Expansion of Alabama Meat Packing Facilities

The largest purchaser of native Alabama livestock, R. L. Zeigler, Inc., announced in May the completion of a $100,000 expansion program at the firm's Selma plant.

Announcement was made by J. M. Gentry, general manager of the Zeigler operation in Selma and South Alabama.

The plant expansion, just completed, will increase the beef production facilities of Zeigler's Selma plant by 50 per cent.

This Alabama-owned and operated firm normally buys nearly 100,000 head of hogs annually from Alabama producers.

In terms of dollars, these purchases represent some $15,000,000 yearly, varying with current market prices.

The Alabama packing firm is known as a "model" company in the meat packing industry.

Your Dependable Source . . . For Quality*

METALS

Aluminum Alloys, Babbitt Metals, Pig Lead,
Brass Ingots, Lead Alloys, Pig Tin, Tin Alloys
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CP&L Launches Contest For Soil Conservation

The "Finer Farms" phase of the 1955 Finer Carolina contest will run from July 1 of this year until June 30, 1956, and will feature competition in 60 counties of North and South Carolina.

Winners will be selected on the basis of soil and water conservation. They will receive a total of $2,800 in prize money from Carolina Power & Light Company, sponsor of the contest.

Awards totaling $1,800 will be made to winning rural communities, $500 to county boards of soil conservation supervisors who show best results, and $500 to individual supervisors who advise with the top-scoring communities.

"This type of program was requested by and designed by soil conservation supervisors and soil conservationists," according to E. N. Pope, CP&L's advertising director and contest director.

He explained that each of 204 soil conservation supervisors in the area served by Carolina Power & Light Company is entitled to sponsor one competing community. A working committee will be organized in each community to encourage and advise individual farm families with the goal of making that community "a showplace of soil and water conservation."

Freeport to Produce Sulphur From New Louisiana Salt Dome

Freeport Sulphur Company will install facilities to produce sulphur from a newly discovered salt dome deposit in the Louisiana tidelands, the company announced recently.

The deposit, known as Lake Pelto, is located near its Bay Ste. Elaine mine about 60 miles southwest of New Orleans.

Beneath 6 to 8 feet of water, Lake Pelto is within a mile of the open Gulf, being separated only by a narrow island.

"This is the first of our sulphur properties which is entirely under water," the statement said. "The mining of the deposit will involve new and difficult problems not previously faced in the coastal marshlands."

Poultry By-products Utilized By New South Carolina Firm

A new plant which will convert waste poultry by-products into basic feed ingredients will be established in York County. The new plant, which will sell its product to feed mills, was announced by R. H. Finkernagle, managing director of the Rock Hill Chamber of Commerce, and S. W. Gable, acting director of the State Development Board.

Fort Mill Industries, Inc., has purchased a 19-acre site just outside of Fort Mill, where construction of the new plant will begin almost immediately. The $100,000 plant is expected to employ approximately 30 men at the outset and to begin operations around August 1.

LATE NEWS BRIEFS

(*Continued from page 48*)

Two Way Moving Sidewalk

passengers and their baggage from the ticket office to planes and bring incoming passengers from the planes into the terminal. The total length will be 1,406 feet, more than twice the combined length of all other passenger conveyors currently in operation. The cost of the Dallas installation will be $234,703, and it is scheduled to be completed in 1957.

Passengers stand on a rubber carpet fastened to a train of platforms, or pallets, mounted on rubber-tired wheels which run on a steel track. The rubber carpet stretches like a rubber band and is anchored to the pallets under tension. When going around a curve, the carpet stretches on the outside curve and contracts on the inside. It contains no reinforcing fabric such as is required on conventional passenger conveyors where a rubber belt pulls the load over a series of closely-spaced rollers. Patents have been applied for on this and several other features of the Hewitt-Robins conveyor.

The conveyor is driven by electric motors that transmit power to the pallets by means of a "caterpillar" type of chain which engages steel "dogs" on the underside of each pallet. The pallets are connected together by universal joints to form a continuous train. The carpet itself does not help to pull the load but functions entirely as a smooth, anti-skid surface for the passengers.

The conveyor can run horizontally and over moderate grades up and down. It requires about 30 per cent less horsepower than other passenger conveyors and has fewer moving parts to lubricate and wear out.

One of its main advantages is its ability to carry passengers in two directions. This is possible because it can turn around and travel in a continuous circuit. Two-way travel on conventional conveyors could be achieved only by the installation of two separate conveyors at twice as much initial cost and cost of maintenance.

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You'll be surprised how Hendrick Perforated Ornametal fabricated into products can add a magic touch to sales. Today, more and more designers keep a copy of Hendrick's Ornametal catalog close to their drawing board. The reason is plain—Hendrick Ornametal dresses up and adds sales appeal to product appearance. Whatever your needs be . . . if you design or sell radiator enclosures, stoves, lockers, furniture or any appliance, you can rest assured there's a Hendrick Ornametal design suited to your needs. For more complete details on how Hendrick can help your profit picture, call your nearby Hendrick representative today.

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$9,000,000 Hydrocarbon Plant To Be Built at Maytown, Ky.

The Kentucky Hydrocarbon Company, recently organized subsidiary of Kentucky-West Virginia Gas Company, Ashland, will build a $9,000,000 hydrocarbon recovery plant at Maytown in Floyd County about 15 miles south of Prestonsburg and a $1,296,700 pipeline from the Virginia state line near Osborn Gap to Maytown.

The plant will be capable of producing about 10,000 cubic feet per day of ethane, propane, butane, and natural gasoline in liquid form. The products will be sold under a long-term contract and delivered by pipeline to the Carbide-Carbon Chemical Company of West Virginia. The plant is expected to be in operation by January 1, 1957 and to employ about 40 workers.

Established Industry Attracts Related Industry to Kentucky

Russell Lund, Airco manager, has announced that American Aniline & Extract Co. of Philadelphia will build a polyvinyl alcohol plant adjacent to the new plant of Air Reduction Chemical Company, which has only just started construction recently.

The American Aniline plant will be just across Highway 95 from Air Reduction plant and immediately adjacent to General Aniline & Film plant, whose high pressure acetylene derivatives plant is also under construction.

Basic chemicals (carbon) in the form of acetylene gas will be piped from National Carbide's huge installation at Calvert and the other basic material, vinyl acetate monomer, will also be piped into the new American Aniline Extract plant.

Texas Eastman Plans Expansion For Longview Oxo Plant

Demand by users of products that depend upon the "butyl family," particularly in the field of plastics, already exceeds the original planned-for capacity of the new Longview, Tex., plant of Texas Eastman Co., division of Eastman Kodak Co. As a result, James C. White, President of Texas Eastman Company, announces that an expansion of the Oxo facilities at Longview has been approved and already is under way. The increase, it is expected, will provide adequate capacity for manufacture of butyl and derivatives, such as 2-ethyl hexanol, demand for which has outrun present capacity.

In discussing the new equipment planned for the Texas plant, Mr. White points out that the projected facilities will permit production of other important chemicals in addition to the butyls, such as propyl aldehydes and derivatives, anyl aldehydes and derivatives, and decyl alcohols.

Provision also is being made at Texas Eastman for modification of some of the auxiliary equipment to permit rapid expansion of facilities manufacturing neopentyl glycol and trimethyl pentanediol, as demand warrants.

The new facilities at Longview are expected to be in operation by late fall of this year.

Atlanta Paper President Receives "Achievers Award"

"The Achievers Award"—highest honor in the Junior Achievement program—has been bestowed on Arthur L. Harris, president of Atlanta Paper Company and leader of the youth development program in Georgia.

The award represented by a large handsomely engraved placque was presented by Luther H. Randall, honorary president of Junior Achievement of Georgia, Inc., at the third annual "Future Unlimited" banquet recently.

Electronics Firm Producing At White Rock, South Carolina

A Columbia-owned company formed to manufacture a new invention has started production at White Rock, S. C., it was announced by S. W. Gable, Acting Director of the State Development Board.

Electronics, Inc., will market a product called "Test-A-Tube" which its inventor, Jack Wooten, says is designed for testing radio and television tubes in the home. The company will also manufacture children's record players.

W. A. Walters, sales manager, has opened headquarters for the sales department at Greenville and is currently seeking national distribution channels for the products.

WHO'S WHERE

A. J. Carrado, engineering administrative assistant at American Potash & Chemical Corporation's main plant at Trona, Calif., has been named by the company as personnel and office manager of **American Lithium Chemicals, Inc., at San Antonio, Texas.**

American Lithium Chemicals, Inc., which was formed in late 1954, now is constructing the San Antonio manufacturing plant which is expected to go into production the latter part of this year. The new company will process lithium ores from Bikita, Southern Rhodesia, Africa, in which American Potash & Chemical Corporation has a substantial interest. American Potash & Chemical Corporation owns 50.1 per cent interest in the newly-formed company.

In his new position, Carrado will be responsible for administrative functions at the San Antonio plant under **George Deck,** who recently was named manager of the new facility. Personnel at the plant is expected to total about 125 employees at full production.

• • •

Francis G. Murray, Jr., has been named sales representative in the City of Baltimore for the heating and air conditioning equipment manufactured and distributed by **National-U. S. Radiator Corp., Johnstown, Pa.**

According to Carroll M. Baumgardner, senior vice president for sales, Mr. Murray has joined the sales staff of the company's branch sales office at 2100 St. Paul St., Baltimore.

Mr. Murray was most recently selling steel products of Bethlehem Steel Co. Prior to that activity he was a Baltimore sales representative for Shepherd Electric Co. and Seiberling Rubber Co.

• • •

Effective immediately, **Jefferson Chemical Company, Inc.,** announces the following new appointments to its Operations Department staff: **L. R. Strawn,** Manager, Manufacturing Division; **M. H. Holmes,** Manager, Neches Plant; **A. K. May,** Sales Manager; **P. R. Monaghan,** Manager, Technical Service Division; **Dr. N. A. Agapetus,** Manager, Distribution Division; **Dr. L. G. Boatright,** Manager, Market Development Division; **J. J. Glover,** Assistant to Vice President, Operations, in which capacity he will also be responsible for Market Research.

• • •

Appointment of **Solon D. Fisher,** to the position of Technical Assistant to the Manager of the Ammonium and Potassium Section, **Solvay Process Division, Allied Chemical & Dye Corporation,** effective July 1, 1955, has been announced by L. B. Gordon, Vice President.

A graduate of Kansas State College with a degree in Chemical Engineering, Mr. Fisher's employment with Solvay dates back to 1948 when he was assigned as a salesman in the Company's St. Louis Branch. Prior to that time he had served in the Chemical Warfare Branch of the U. S. Army and, after being discharged in 1946, held a civilian position in the Army's Chemical Munitions Development and Testing Section. In 1947 he was employed as a research chemical engineer at the Mid-west Institute in Kansas City, Missouri.

• • •

John P. Weeks, Extension Poultryman for the Alabama Extension Service has been named to the staff of Cosby-Hodges Milling Co., President W. Cosby Hodges has revealed.

Hodges said Weeks' appointment as Director of Research and Education for Cosby-Hodges was effective July 1.

Weeks, widely known throughout the South in the poultry industry, was reared on a farm in Lamar County, Ala. and graduated from Alabama Polytechnic Institute in 1940 with a degree in Agricultural Education. From 1940 to 1942 he taught Vocational Agriculture at Uriah, and in 1952 he became a poultry inspector for the United States Department of Agriculture in Birmingham. In 1944 he joined the Extension Service and served until 1948 in county agent work in Tuscaloosa County. In 1948 Weeks was promoted to the Extension Staff at Auburn as Poultry Marketing Specialist and in 1950 he became Extension Poultryman and Extension Poultry Marketing Specialist in which capacity he is presently serving.

• • •

Joe D. Robertson of Decatur, Georgia, has been appointed Sales Engineer for

Joseph D. Robertson

the **W. W. Sly Manufacturing Co. of Cleveland, Ohio, it was announced by**

(Continued on next page)

Superior Service From Every Angle at CONNORS

A workman in a Southern fabricating plant is shown welding Connors' angles to form a long span joist.

Considered from any angle—mill flexibility, transportation facilities, or location—Connors offers you important service advantages . . .

All Connors' products are quality steel, rolled to exact requirements, neatly bundled, and delivered to you *when you want them.*

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OF PITTSBURGH
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(*Continued from page 57*)

David E. Neustadt, Sales Manager of the Sly Company.

A native of Dalton, Georgia, Mr. Robertson is an engineering graduate of Georgia Institute of Technology.

His previous associations have been in sales engineering for the A. O. Smith Corporation, and the F. J. Stokes Machine Company, Philadelphia, Pennsylvania.

• • •

John R. Mock, Jr., has been appointed chief car inspector of the Central of Georgia Railway, Savannah, succeeding A. H. Heath, Sr., who died several weeks ago.

A native of Savannah, Mr. Mock entered Central service Oct. 9, 1935, as carman apprentice in the company's Savannah shops. He later worked as carman at Savannah and Columbus and in 1941 was promoted to car foreman at Columbus, a post he held until now with exception of service in the Army during World War II.

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David H. Noble was named electrical engineer for the Central of Georgia Railway, with headquarters at Savannah, effective May 16.

He succeeds William H. Mims who was recently promoted to superintendent of motive power and equipment.

Mr. Noble, a native of Brooklyn, N. Y., was graduated from the University of Kentucky at Lexington in 1949 with a BS degree in electrical engineering. He has worked for two railroads, serving as machinist apprentice for the Central Railroad of New Jersey for a short while in 1944 and as special apprentice, draftsman, and traveling electrical foreman of the Atlantic Coast Line since 1950. He comes to Savannah from Wilmington, N. C.

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The appointment of **John R. Hopkins** as Assistant Manager of the Southern District sales office of **Becco Chemical Division, Food Machinery and Chemical Company,** has been announced by John Shea, Vice President in charge of sales. Mr. Hopkins will work directly under D. S. Quern, Manager of Becco's District Sales office in Charlotte, N. C.

John R. Hopkins

Mr. Hopkins joined the Research Staff of the Becco Chemical Division in 1935, at which time he became concerned with hydrogen peroxide bleaching of textiles and related wet processing. In 1946, he was transferred to Charlotte where, as a technical representative, he provided customer service to mills engaged in textile and pulp bleaching operations. Mr. Hopkins' activities in this field will continue unchanged.

• • •

Mr. Jay G. Gates has been appointed Southern Sales Manager for the Transformer Division of the Kuhlman Electric Company, effective July 5, 1955.

Mr. Gates will be regional Sales Manager in eleven southern states; North Carolina, South Carolina, Georgia, Florida, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas with the exception of the El Paso area. He will coordinate relations between customers, sales personnel, and the Kuhlman factory located at Crystal Springs, Mississippi. He will also act as liaison between the Company's southern activities and the Bay City headquarters.

• • •

Seaboard Air Line Railroad Company announced that **Mr. E. L. Hobbs** is appointed General Agent, Houston, Texas, with headquarters at 6120 Community Drive, Houston 5, Texas.

Mr. Hobbs will handle solicitation and related matters for the Company in the State of Texas.

New 90th Year Anniversary Edition Over 9150 Textile Plants Reported!

Davison's Textile Blue Book reports the entire textile manufacturing industry with dyers and finishers, all allied firms and dealers. The mill reports give details on each plant—date established, capital, executives' names, machinery operated, goods made and number of employees, as well as much other data.

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New Index to all cotton merchants, shippers, brokers, dealers, etc. in U.S.A. arranged alphabetically by name. Thumb indexes for instant reference to any section. Gold and cloth bindings.

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1955 90th Year Handy size (not shown) $6.50
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FINANCIAL NOTES

According to George T. Naff, president, **Texas Eastern Transmission Corporation** has entered into a bank loan agreement dated as of May 1, 1955, with five New York banks, providing for a revolving credit of $56,000,000 until May 1, 1957. Any borrowings outstanding on May 1, 1957, may be extended to May 1, 1960.

The agreement provides for interest at the rate of ¼ of 1% per annum on any unused commitment, and interest on any borrowings at the rate of 3% per annum prior to May 1, 1957, and at the rate of 3¼% per annum after May 1, 1957. Principal installments of $545,000 each are payable quarterly on any borrowings outstanding after May 1, 1957.

Mr. Naff stated that the funds made available through this bank loan agreement are intended for use in connection with two substantial programs. One is the proposed reconversion to a common carrier petroleum products pipeline of the major portion of the Little Big Inch line and the construction of new gas pipeline facilities sufficient to maintain the company's present natural gas delivery capacity. This project is currently awaiting final Federal Power Commission approval. The second project under consideration is extension of the Texas Eastern natural gas system into new areas of gas supply and expansion of the capacity of the existing gas system north and east of Beaumont.

The banks entering into the bank loan agreement with Texas Eastern are: Manufacturers Trust Company, The Chase Manhattan Bank, The Hanover Bank, Bankers Trust Company, and Chemical Corn Exchange Bank.

• • •

Zonolite Company, Chicago, disclosed in its annual report to stockholders plans for a new $313,000 mill near Greenville, S. C., to meet the growing demand for vermiculite in building construction in the east and southeast.

The mill will employ a new refining process which was successfully introduced in Zonolite's Libby, Mont., plant last year, the report stated. Scheduled for fall operation, the mill will be equipped to utilize ore of low vercimulite content, greatly increasing the total ore reserves of the company, one of the nation's leading producers of the mica-like mineral.

The annual report showed Zonolite sales set a new high of $6,354,510 for the fiscal year ended March 31, as against $5,960,870 for the previous year, a 6.6 per cent increase. Net income declined slightly from $373,883, or 38 cents a share, to $366,044, or 37 cents a share.

A. T. Kearney, president, reported that sales for April and May, 1955, were about 15 per cent ahead of the same months in 1954, "and the outlook for the remainder of the year is promising."

Emphasizing the fact that the use of lightweight aggregates like vermiculite has increased more than 15 times since 1945, Kearney told stockholders, "Zonolite Company is strong in its belief that results of the past few years are not to be regarded as a ceiling but rather as a base from which new growth has already started."

In addition to its mines and processing installations in Libby and Traveler's Rest, S. C., the company operates plants in Chicago, Dearborn, Mich.; Ellwood City, Pa.; Wilder, Ky.; Trenton, N. J.; Albany, N. Y.; Nashville; Little Rock; North Billerica, Mass.; New Orleans; St. Louis, and Kansas City, Mo.

• • •

United Gas Corporation stockholders were given a report on the firm's expanding operations in the first five months of 1955 at the annual stockholder meeting at United Gas headquarters recently.

N. C. McGowen, president, reported increased revenues in the five-month period from sales of natural gas, liquid hydrocarbons, crude oil and potash, as compared with the same period in 1954.

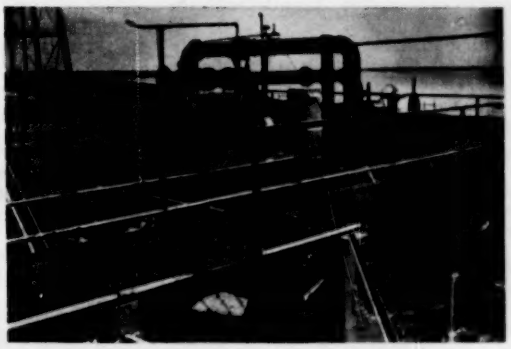
Consolidated net income for the period amounted to $13,062,000, McGowen said, or $1.01 per share on the 12,890,495 shares of common stock outstanding. Net income for the five months in 1954 was reported last year as $1.07 per share, but reflected gas sales under rates which were reduced later in the year by the Federal Power Commission. If the present lower rates were given effect in calculating the net income for that period in 1954, earnings would have been 99 cents per share, or two cents lower than this year, according to McGowen's statement to stockholders.

Expenses and deductions in the five months of 1955 were up $8,200,000 over those of last year, more than half of the increase being in the cost of gas purchased. The average cost per thousand cubic feet was up more than 6/10 cent this year.

McGowen summarized the Corporation's exploration and drilling program over the past five years, stating that it had added 1.5 trillion cubic feet of gas reserves and 66 million barrels of liquids. The firm has leases in the Gulf of Mexico off the coast of Louisiana which have fine possibilities, according to McGowen.

Construction is well under way on a chemical plant to be operated by Escambia Bay Chemical Corporation near Pensacola, Florida. United Gas Corporation owns 45 per cent of the chemical firm, which will place its ammonia plant in operation this year and will have $27,000,000 invested in plants when all construction is completed about two years from now. Another 45 per cent is owned by Electric Bond and Share Company and 10 per cent by National Research Corporation.

WHERE **SURE FOOTEDNESS** COUNTS



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Standard Steel Spring Division

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BUSINESS NOTES

Appointment of **IMC Equipment, Inc., 1327 Spring St., N. W., Atlanta,** as its **Georgia** franchise representative was announced by the **Automatic Transportation Company, 149 W. 87th St., Chicago.**

Supervising sales and service operations for the Atlanta firm is R. L. Warwick, president of IMC who has had more than 10 years experience in the materials handling field.

Assisting Warwich are R. B. Fogarty, J. T. Fulwiler, Jr., and William Chapman. Fogarty heads up service operations for IMC; Fulwiler and Chapman are engaged in sales activities.

George A. Hinckley, general sales manager for Automatic, world's largest producer of electric-driven industrial trucks, said that the new franchise arrangement is effective immediately.

IMC will handle the entire Automatic line of rider-type and operator-led industrial trucks, Hinckley said. The company services industrial and institutional accounts throughout the state of Georgia.

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Enoch R. Needles, senior partner of Howard, Needles, Tammen & Bergendoff, of New York and Kansas City, has been named by the Board of Direction of the **American Society of Civil Engineers** as its nominee for President of the 38,000-member Society, oldest national organization of engineers in the country. Mr. Needles at present is a Vice President.

William Roy Glidden, of Richmond, Assistant Chief Engineer of the Virginia Department of Highways, currently is President. Balloting for President will be by mail in September. Installation of the new President will be at the Annual Meeting in New York in October. Vice Presidents are nominated and elected by Zones and Directors by Districts.

Mr. Needles was born in Brookfield, Missouri.

• • •

At a meeting of the Board of Directors of **Republic Steel Corporation** held recently, **Mr. T. M. Girdler,** Chairman of the Board, relinquished his duties as chief executive officer of the corporation. He will continue as Chairman of the Board of Directors of the corporation.

Mr. C. M. White, President of the corporation, has assumed the duties of chief executive officer.

• • •

Cochrane Corporation, of Philadelphia, Pa., announces the appointment of **Dickey Engineering Company, 2721 Central Ave., N. W., Knoxville, Tennessee,** as Sales Representative in Tennessee.

• • •

Jefferson Chemical Company transferred its headquarters offices and about 50 employes from New York to **Houston, Texas,** July 1, it was announced by George R. Bryant, president. Offices are located in the Mafridge Building, 411 Fannin Street.

The Company's main plant is located at Port Neches, Texas, and the research laboratory is at Austin. Sales offices are maintained in New York, Chicago, Charlotte, North Carolina, and Houston.

• • •

A new catalog which completely covers the field of heavy-duty oil-hydraulic lifting devices for industrial use has been published by **Rotary Lift Co., Memphis, Tenn.**

Installation photographs range from simple freight handling applications to involved aircraft testing lifts and stage lifts and automatic materials handling uses.

• • •

The International Nickel Company, Inc., announced the opening of the **Southeast States Technical Field Section, Development and Research Division,** with headquarters at 3179 Maple Drive, N. E., **Atlanta, Georgia.** Embracing the States of North Carolina, South Carolina, Georgia, Florida and Alabama, the new Section will furnish industry in the area with technical information and assistance relating to alloys containing nickel.

Richard J. Greene, Metallurgist, is in charge of the Section.

• • •

Two firms have been named distributors of **Chambers** built-in cooking equipment, A. H. Scheffer, sales manager of the Indianapolis range firm has announced.

The two firms are **Tri-State Appliance Company, 200 Ninth St., Huntington, W. Va.,** and **Hart-Greer, Inc., 1625 Second Ave., South, Birmingham, Ala.** They will handle Chambers built-in units in their respective cities and surrounding trading areas.

Officials of the two firms are: for Tri-State, Donald R. Hart, vice president and general manager; and for Hart-Greer, L. S. Hart, president, and John C. Evins, executive vice president and sales manager.

• • •

Richard S. Reynolds, Jr., of Richmond, Va., who is president of **Reynolds Metals Company,** has been elected a term trustee of the University of Pennsylvania, it was announced by Robert T. McCracken, chairman of the trustees.

Reynolds was graduated from the Wharton School of Finance and Commerce at Pennsylvania in 1930 with the degree of bachelor of science in economics.

As a term trustee of the University he succeeds Dr. Alfred H. Williams, president of the Federal Reserve Bank of Philadelphia, whose election as a life trustee also was announced.

• • •

A new firm, incorporated as **Laurel Products, Inc.,** has been formed in **Laurel, Mississippi** to engage in the manufacture of custom made refrigeration units.

Founders of the company are local businessmen who are engaged in refrigeration business, metal work business and allied fields.

J. Y. Downing, Jr., formerly general manager of the Laurel plant of Norris Dispensers, Inc., manufacturers of milk dispensers, has been named as Vice-President and General Manager of the firm. W. M. Tittle, President of the Electric Appliances, Inc., has been named President, and C. H. Westphalen, former vice-president and general manager of the Masonite Corporation, is Secretary-Treasurer.

• • •

Appointment of **Metal Goods Corp., 711 Milby Street, Houston 1, Texas,** as distributor of Hoze-lok re-usable fittings for hydraulic hose is announced by D. A. Cameron, industrial sales manager of **Parker Appliance Co., Cleveland, Ohio.**

H. T. Gregg, vice-president of Metal Goods at Houston, states that a range of fittings will be stocked to assure prompt handling of needs in the industrially booming Texas gulf area.

• • •

The appointment of **Harry L. Anderson** as superintendent of the masonry department of **Republic Steel Corporation's Youngstown District** steel plant was announced by John H. Graft, district manager.

Mr. Anderson, formerly assistant superintendent of the mason and labor department of Republic's Warren District steel plants, is a native of Louisville, Ky.

• • •

The appointment of **Homer R. Brown** to the newly created post of sales manager of the Milwaukee steel service plant of **Joseph T. Ryerson & Son, Inc.,** was announced by Melvin B. Monson, plant manager.

Brown became associated with Ryerson in 1930 in a sales capacity. He has represented the company in the Milwaukee area since that time. In assuming his new administrative responsibilities, Brown retains a small group of accounts which he will continue to serve in a direct sales capacity.

• • •

George Ewald Co., 309 S. 9th Street, Louisville, Ky., has been appointed a distributor for Whirlpool Corporation, it was announced by Jack D. Sparks, Whirlpool sales manager.

The new distributor will service the Louisville, Ky., and Evansville, Ind., distributing areas.

Van Zandt Supply Co., 1123 Fourth Ave., Huntington, W. Va., also has been appointed a distributor for Whirlpool Corporation effective July 1, it was announced.

In addition, **Southern Radio Corp., 1625 W. Morehead St., Charlotte, N. C.,** has been appointed a distributor.

James P. McMillan, president and treasurer, directs activities of the firm, which replaces McClain & Pleasants, Inc. The new distributor will service the western half of North Carolina.

And **R. P. McDavid & Co., Inc., 1430 Second Ave., N. W., Birmingham, Ala.,** has been appointed a distributor for Whirlpool Corporation.

Robert P. McDavid, president, directs activities of the firm, which replaces Hart-Greer, Inc. The new distributor will service the state of Alabama and counties west of the Apalachicola River in Florida.

• • •

Thos. J. Anderson, Publisher, has announced that the combination of The Arkansas Farmer and The Mississippi Farmer, formerly known as the Mid-South Farm Paper Unit, will be designated as the **Southern State Farm Paper Unit,** effective immediately.

The change in the Unit name is being made to accommodate The Georgia Farmer, which will begin publication in January, 1956. Combination savings (one order, one plate, and one bill) will be available on any two of the three state farm papers, with further reductions when all three magazines are used.

• • •

Creation of a new electronic tube sales district covering most of Indiana and part of **Kentucky,** was announced by John T. Thompson, distributor sales manager for the **General Electric Tube Department.**

Increasing electronics markets in this area resulted in the creation of a new district which will include Indianapolis, Ft. Wayne, South Bend, Terre Haute and Louisville, Mr. Thompson said.

Appointed sales manager for the new district is Frank A. Weeks, Jr., formerly a member of the distributor sales organization at the Tube Department headquarters here.

• • •

The executive offices of the **Pennsylvania Salt Manufacturing Company** and headquarters of its operating divisions will be moved from the Widener Building to Philadelphia's newest and most modern office building, Three Penn Center Plaza.

Included in this move are the following components of the consolidated company: Chemical Specialties Division; I. P. Thomas Division; Industrial Chemicals Division; Sharples Chemicals Division; Pennsalt International Corporation.

Albert G. Barton, for 10 years manager of the **Charleston, West Virginia,** factory of **Libbey-Owens-Ford Glass Company,** has been promoted to general manager of window glass production with headquarters in the executive offices at Toledo, it was announced by Curtis W. Davis, executive vice president—production.

Mr. Barton, active in civic affairs in Charleston and with LOF for more than 28 years in various capacities at its plants in Toledo, Ohio and Ottawa, Ill., assumed his new post on June 1, although he will remain in Charleston for a few weeks pending completion of other transfers.

In the new post Mr. Barton will have general management of all window glass operations of Libbey-Owens-Ford including the Charleston, W. Va., and Shreveport, La., factories. These plants have more than 2,400 employees and produce window glass by the Colburn horizontal, continuous drawing and long-annealing method.

He will be succeeded at Charleston by Albert W. Swillinger, who has been assistant factory manager, and James T. Zellers, Jr., general superintendent of glassmaking, has been promoted to assistant factory manager.

• • •

Atlantic Steel Company has been appointed distributor for aluminum warehouse products by the **Kaiser Aluminum and Chemical Sales, Inc., of Oakland, California.**

The Atlanta firm will distribute the Kaiser line of aluminum sheets, plates, bars, rods, wire and tubing through its Warehouse Division, according to H. B. Johnson, company vice-president in charge of sales.

These new products will supplement the complete line of steel items now being sold through Atlantic Steel's Warehouse Division. In addition to aluminum, the company carries one of the South's largest and most diversified stocks of carbon and stainless steel, and has recently expanded its line of structural sections.

NEW PLANTS

(Continued from page 15)

DALLAS—Texas State Optical Co., Main & Stone Sts., received bid from Gaynor Construction Co., 3225 Love Field Dr., at $33,350, for remodeling optical building. George Dahl, 2101 N. St. Paul St., Dallas, Archt.

DALLAS—Trinity Steel Co., Inc., 3301 S. Lamar St., plans manufacturing plant and office, 4000 block Irving St. Mallory Collins, 2921 Fairmount St., Archt.

FORT WORTH—Davis Motors, 208 Taylor St., received bid from Horace O. Duncan, 2917 Bryan St., at $216,495, for service sales building, University Drive & W. Vickery Blvd. Harkrider, Clark & Jones, 1004 T&P Bldg., Archts.-Engrs.

FORT WORTH — Rowan Oil Co., Fair Bldg., received bids for office building, 6200 Camp Bowie, at $350,000. J. H. Hilliams & Co., 1407 S. Akard St., Dallas, Archts.

HOUSTON — Ideal Cement Co., Kansas City, Mo., plans $55,000,000 expansion, which includes an $8,000,000 plant at Houston.

HOUSTON—Sears, Roebuck & Co., Houston, let contract to Linbeck Constr. Corp., Box 13007, Houston, for warehouse and service building on Griggs Road. Cowell & Neuhaus, 2308 LaBranch St., Houston, Archts.

HOUSTON—Southwestern Bell Telephone Co. let contract to Pence Construction Co., P. O. Box 226, Bellaire, Texas, for Houston North Service Center. Cato, Austin & Evans, 2401 LaBranch St., Houston 4, Tex., Archts.

HOUSTON—Southwestern Bell Telephone Co. let contract to Robert H. Smith & Co., 1915 Kolfahl St., Houston, for Northwest Service Center. Cato, Austin & Evans, 2401 LaBranch St., Houston 4, Tex., Archts.

LUBBOCK—Lubbock Bag Co., 304 Ave. L, plans new plant on Avenue M, estimated to cost $175,000. Haynes & Kirby, 1902 Dixie Drive, Archts.

LUBBOCK—Time, Inc., Freight Lines received bid from S. R. Duncan, 3607 Ave. Q, Lubbock, at $79,500, for office alterations and additions, 2604 Texas Ave. Butler-Kimmel Co., 412 Ave. M, Archts.

SEQUIN — Southwestern Bell Telephone Co. received bids for Franklin dial building. Phelps & Dewees & Simmons, Box 8127, San Antonio 12, Texas, Archt.

VIRGINIA

CHARLOTTESVILLE — Daily Press received bids for new building and alterations, Market & 5th Sts. Stainback & Scribner, 112 Third St., N.E., Archts.

LEESBURG—Bell Telephone Co. received bids for building, Section A. Baskervill & Son, Richmond, Archts.

NORFOLK—Yavner Bros., 215 W. 24th St., received bids for warehouse and offices. John E. Simpson, Archt., 508 McKevitt Bldg.

RICHMOND—Manchester Board & Paper Co., 111 Hull St., Richmond, received bids for office building on 9th St. Rd. J. Henley Walker, Jr., 200-A E. Cary St., Archt.

RICHMOND — Pepsi-Cola Bottling Co., 1611 W. Main St., received bids for addition to present plant. H. Carl Messerschmidt, 1105 Mutual Bldg., Archt.

ROANOKE—Lone Star Cement Corp., New York, to expand plant near Roanoke.

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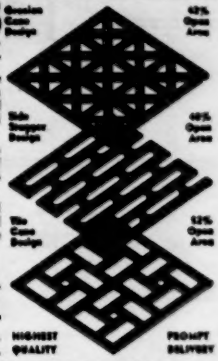

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INDEX FOR BUYERS

Page Numbers Indicate Where Products Can Be Found

Architects 62
Banks & Bankers 18
Bridges 15, 63
Building Maintenance Materials .. 65
Buildings (Steel) 5, 63, 65
Business Consultants 62
Chemists 62
Concrete (Lightweight Structural) 53
Conduit (Non-Metallic) 63
Constructors 62, 63
Contractors 62, 63
Doors (Rolling Steel) 3, 68
Dredging Contractors 62
Engineers 62, 63
Envelopes 63
Flooring (Steel) 20, 54, 59
Flooring Resurfacers 65
Galvanizing 14, 15, 51, 63
Grating (Steel) 20, 59
Hotels 56
Lumber (Creosoted) 18, 63
Lumber (Salt Treated) 18, 63
Machinery (New and Second-Hand) 61
Management Consultants 62
Masonry Units 53
Metals (Non-Ferrous) 54
Perforated Metals 54, 63
Petroleum Products 13
Piling, Poles, etc. (Creosoted) ..18, 63
Pipe (Cast Iron) 63
Professional Directory 62, 63
Railroads 67
Roofing and Siding 19
Screens 55, 65
Sheets (Steel, Galvanized) 64
Sites (Industrial) 6, 7, 8, 15, 19, 67
Slings (Wire Rope) 2
Steel Fabricating 5, 15, 17, 63
Steel Products 2, 51, 57, 64
Steel (Stainless) 64
Structural Steel 15, 17, 57, 63, 64
Tanks and Towers 4, 65
Telephone Service 49
Treads (Stair) 55, 59
Wallboard 19
Water Supply 63
Wire Rope Slings 2

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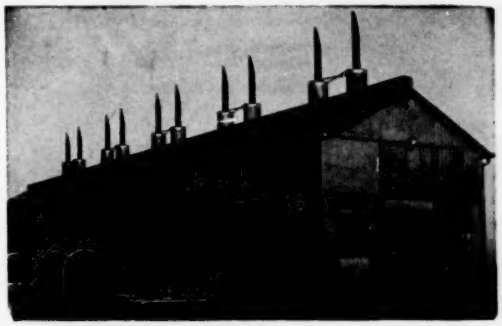

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INDEX TO ADVERTISERS

—A—

AFFILIATED NATIONAL HOTELS 56
Agency—Alert Adv. Agency

ALABAMA POWER CO. 8
Agency—Sparrow Advertising Agency

ALLIED STEEL PRODUCTS CORPORATION .. 65
Agency—Advertising Engineers

AMERICAN BRIDGE DIV., U. S. STEEL CORP. 17
Agency—Batten, Barton, Durstine & Osborn

AMERICAN CREOSOTE WORKS 18

AMERICAN TELEPHONE & TELEGRAPH CO. 49
Agency—N. W. Ayer & Sons, Inc.

ARUNDEL CORPORATION ..... —

ATLANTIC STEEL COMPANY 51
Agency—Lowe & Stevens, Inc.

ATTALA COUNTY, MISSISSIPPI 19

—B—

BAILY-LEWIS-WILLIAMS ..... —
Agency—Talley Embry Advertising Agency

BAKER, INC., MICHAEL, JR. 62

BENGE ASSOCIATES ..... —
Agency—Erik Fris Advertising

BETHLEHEM STEEL CO. 2
Agency—Jones & Brakely, Inc.

BLAIR, INC., ALGERNON 63

BORDEN METAL PRODUCTS CO. 20
Agency—Gordon A. Pihl & Associates

BRISTOL STEEL & IRON WORKS, INC. 63

BUFFALO TANK CORPORATION 65

BURFORD, HALL & SMITH 63

BUTLER MFG. CO. 5
Agency—Aubrey, Finley, Marley & Hodgson

—C—

CATTIE & BROTHERS, JOSEPH P. 63

CHICAGO BRIDGE & IRON COMPANY 4
Agency—Russell T. Gray, Inc.

CITIES SERVICE CO. 13
Agency—Albert Frank-Guenther Law

CONNORS STEEL DIV. 57
Agency—Robert Luckie & Co.

—D—

DAVISON PUBLISHING CO. 58

DAY & ZIMMERMANN, INC. 62

DE LEUW, CATHER & CO. 62

DIAMOND MFG. CO. 63
Agency—Frederick B. Garrahan

DUVAL ENGINEERING CO. 63

—E—

ELECTRIC EQUIPMENT CO. 61
Agency—Storm Advertising Co., Inc.

ELECTRIC SERVICE COMPANY 61
Agency—S. C. Baer Co.

EPPINGER AND RUSSELL COMPANY 63

—F—

FIRST RESEARCH CORP. OF FLORIDA 63
Agency—August Dorr Advertising, Inc.

FISHER COMPANY, ADAM 61
Agency—Shaffer-Brennan-Margulis Advtg.

FORD, BACON & DAVIS, INC. 62
Agency—Victor A. Smith

FROEHLING & ROBERTSON 62

—G—

GEMAR ASSOCIATES 63

GENERAL COAL CO. ..... —
Agency—Atkin-Kynett Co.

GLAMORGAN PIPE FOUNDRY COMPANY .. 63

GOLDSMITH, GUSTAVE M. 62

"GUNITE" ASSOCIATES, INC. ..... —
Agency—Talley Embry Advertising Agency

—H—

HARDAWAY CONTRACTING COMPANY ... 63

HARRINGTON & CORTELYOU 62

HARRIS, INC., FREDERIC R. 62

HARTE CO., JOHN J. 62

HEINEKEN, W. P. 61

HENDRICK MFG. CO. 55
Agency—G. M. Basford Co.

HOOSIER ENGINEERING COMPANY 62

HUNTING, LARSEN & DUNNELS 62

—I—

INDUSTRIAL PROPERTIES CORP. 15
Agency—J. P. Dewey

INTERNATIONAL ENGINEERING CO. 62

—K—

KERRIGAN IRON WORKS, INC. ..... —
Agency—C. P. Clark, Inc.

KINNEAR MFG. CO. 3
Agency—Wheeler, Kight & Gainey

KOSCIUSKO, MISSISSIPPI 19

—M—

MAHON COMPANY, R. C. 68
Agency—Anderson, Inc.

MANHATTAN PERFORATED METAL CO. 63

METALPLATE CO. 14

MIDWEST STEEL CO. 61

MUNDT & SONS, CHARLES 65

—N—

NASHVILLE BRIDGE CO. 15

NEWPORT STEEL CORP. ..... —
Agency—Jaap-Orr Co.

NORFOLK & WESTERN RAILWAY CO. 67
Agency—Houck & Company

NORTH CAROLINA DEPT. OF CONSERVATION & DEVELOPMENT 6, 7
Agency—Bennett Advertising, Inc.

—O—

O'BRIEN, CLARENCE J. 61

OLES ENVELOPE CO. 63

O'NEAL STEEL WORKS ..... —
Agency—Barnett & Barnett

—P—

PALMER & BAKER, INC. 62

PARSONS, BRINCKERHOFF, HALL & MACDONALD 62

PHILADELPHIA TRANSFORMER CO. 61

—Q—

QUINN WIRE & IRON WORKS ..... —
Agency—Lessing Advertising Co.

—R—

RADAR ENGINEERING CO. 62

RESALE DEPARTMENT 61

ROBERT AND COMPANY ASSOCIATES 62
Agency—Liller, Neal & Battle

RUBEROID COMPANY 18
Agency—Fuller & Smith & Ross

RYERSON & SON, INC., J. T. 64
Agency—Calkins & Holden—Carlock-McClinton & Smith

—S—

SANDERSON & PORTER 62
Agency—Calkins & Holden

SAND SPRINGS, OKLAHOMA ..... —
Agency—Gibbons Advertising Agency

SCOVIL MFG. CO. ..... —
Agency—Robotham & Peck, Inc.

SEABOARD AIRLINE RAILROAD COMPANY —
Agency—The Caples Co.

SNARE CORP., FREDERICK 62

SOUTHERN LIGHTWEIGHT AGGREGATE CORP. 53
Agency—Cabell Eanes, Inc.

SOUTHERN NATURAL GAS CO. ..... —

SOUTHERN RAILWAY SYSTEM ..... —
Agency—Cunningham & Walsh, Inc.

STANDARD STEEL SPRING DIV. OF ROCKWELL SPRING & AXLE CO. 59
Agency—Paxson Advertising, Inc.

STONHARD CO. 65
Agency—Philip Klein Advertising, Inc.

SVERDRUP & PARCEL, INC. 62

—T—

TENNESSEE COAL & IRON DIV. ..... —
Agency—Batten, Barton, Durstine & Osborn

TOLEDO TESTING LABORATORY 62

—U—

UNION TRUST COMPANY OF MARYLAND .. 18

U. S. PIPE & FOUNDRY COMPANY ..... —
Agency—H. B. Humphrey, Alley & Richards, Inc.

U. S. STEEL CORP. 17
Agency—Batten, Barton, Durstine & Osborn

—V—

VIENER & SONS, HYMAN 54

VIRGINIA ENGINEERING COMPANY, INC. 62

—W—

WATERTIGHT UNDERGROUND CONDUIT .. 63

WATSON & HART 62

WHITMAN, REQUARDT & ASSOCIATES ... 62

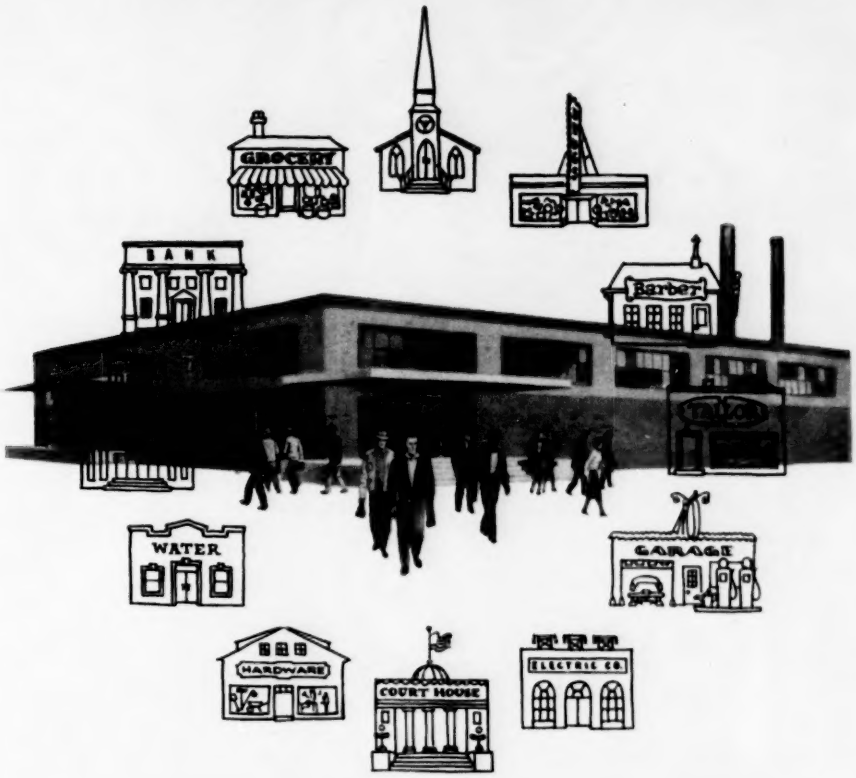
WIEDEMAN & SINGLETON, INC. 62

WIGHT & CO. 62

WILEY & WILSON 62
Agency—Paulson-Gerlach & Associates

WISCONSIN MOTOR CORPORATION .... —

if your plant employs 100 people it's worth $590,000 a year to some town!



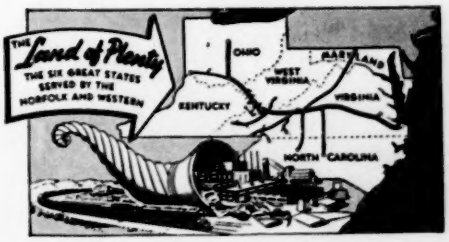
The average new factory employing 100 people brings its community $590,000 a year in personal income, $270,000 more in bank deposits, 174 new jobs, $360,000 more in annual retail sales, and adds 296 more people who will vote, pay taxes, support churches and charities and make the community grow.*

In big cities, these figures can easily be overlooked, but in the smaller towns, these assets are *big, visible and really appreciated.* That's why — **SMALL TOWNS HAVE BIG HEARTS FOR INDUSTRY!**

There are *many* clean, progressive small communities in The Land of Plenty where people roll out a big welcome carpet for small plants. These communities offer important advantages for efficient manufacture and distribution — *PLUS AN APPRECIATIVE AND COOPERATIVE PUBLIC.* Let our plant location specialists tell you about ideal plant sites in such communities . . . in confidence and without obligation. *Write, Wire or Call —*

INDUSTRIAL AND AGRICULTURAL DEPT.,
Drawer MB-471 (Phone 4-1491, Ext. 471)
Norfolk and Western Railway
ROANOKE, VIRGINIA

*Statistics based on reports of United States Chamber of Commerce.

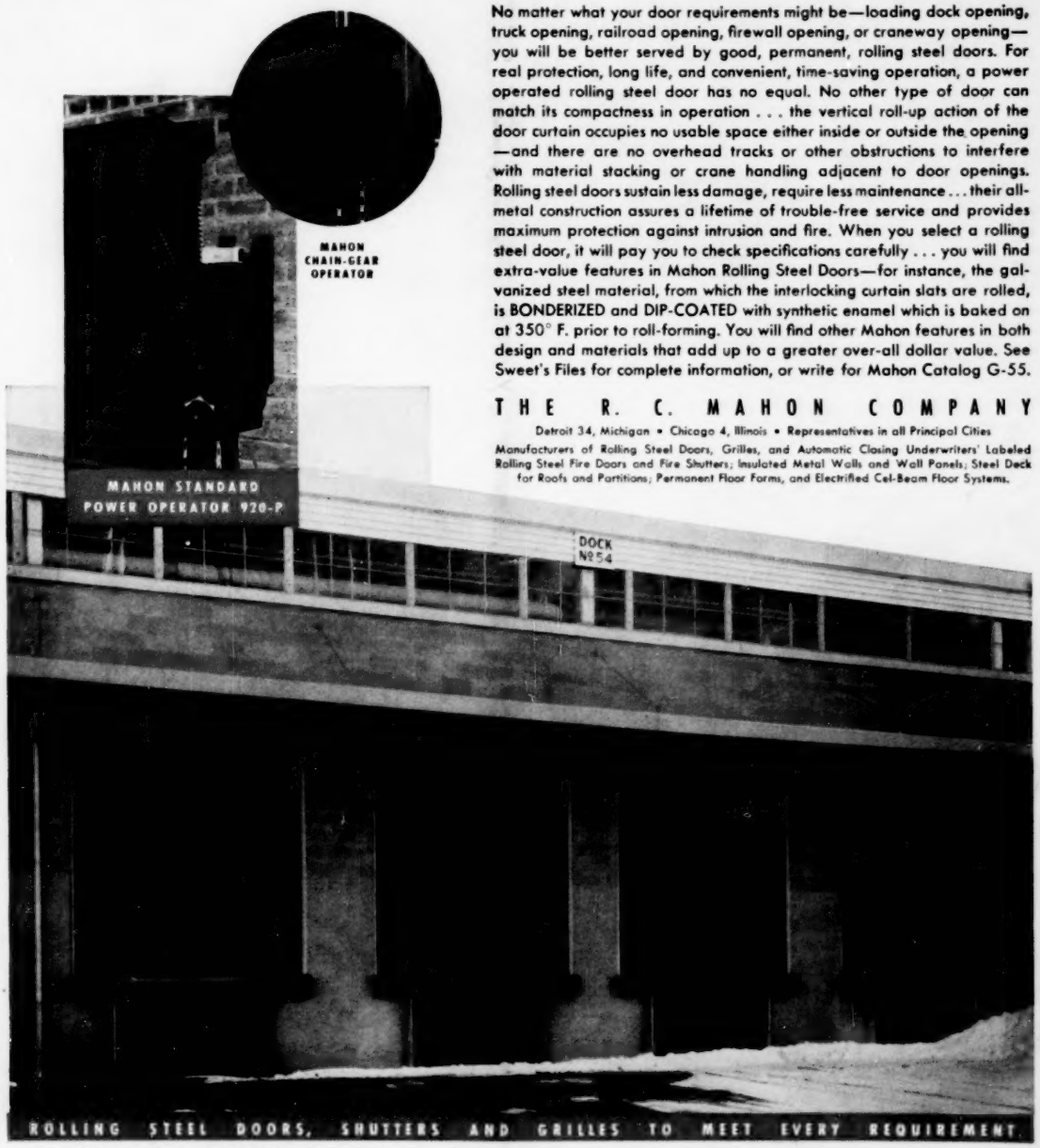


Norfolk and Western RAILWAY

Your traffic manager is a transportation specialist. Transportation is a major factor in good plant location. Consult your traffic manager while you're studying plant sites.

Rolling Steel Doors

Manually, Mechanically, or Electrically Operated



No matter what your door requirements might be—loading dock opening, truck opening, railroad opening, firewall opening, or craneway opening—you will be better served by good, permanent, rolling steel doors. For real protection, long life, and convenient, time-saving operation, a power operated rolling steel door has no equal. No other type of door can match its compactness in operation . . . the vertical roll-up action of the door curtain occupies no usable space either inside or outside the opening—and there are no overhead tracks or other obstructions to interfere with material stacking or crane handling adjacent to door openings. Rolling steel doors sustain less damage, require less maintenance . . . their all-metal construction assures a lifetime of trouble-free service and provides maximum protection against intrusion and fire. When you select a rolling steel door, it will pay you to check specifications carefully . . . you will find extra-value features in Mahon Rolling Steel Doors—for instance, the galvanized steel material, from which the interlocking curtain slats are rolled, is BONDERIZED and DIP-COATED with synthetic enamel which is baked on at 350° F. prior to roll-forming. You will find other Mahon features in both design and materials that add up to a greater over-all dollar value. See Sweet's Files for complete information, or write for Mahon Catalog G-55.

THE R. C. MAHON COMPANY

Detroit 34, Michigan • Chicago 4, Illinois • Representatives in all Principal Cities

Manufacturers of Rolling Steel Doors, Grilles, and Automatic Closing Underwriters' Labeled Rolling Steel Fire Doors and Fire Shutters; Insulated Metal Walls and Wall Panels; Steel Deck for Roofs and Partitions; Permanent Floor Forms, and Electrified Cel-Beam Floor Systems.

ROLLING STEEL DOORS, SHUTTERS AND GRILLES TO MEET EVERY REQUIREMENT

Four Mahon Power Operated Rolling Steel Doors installed in a loading dock with mechanical floor levelers in each opening. A total of thirty-nine Mahon Rolling Steel Doors were installed in various types of openings in this new Sutherland Paper Co. Plant, Kalamazoo, Mich. Miller-Davis Co., Designers and Gen. Contrs.

MAHON